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This Issue in Brief

Historical Review of Strikes.

There have been industrial disputes since the beginning of our national history. The causes of these early disputes and the tactics pursued by the strikers and the employers bear close similarity to those existing today. The first quarter of the nineteenth century saw the introduction by the workers of the walking delegate, strike benefits, the use of the general strike when an individual strike proved ineffective, picketing, social ostracism and sometimes physical violence toward "scabs", and the use of the militia and the courts by the employers and public authorities. The number of strikes has not consistently increased with the growth of our industrial population, only a few more strikes occurring in the 1920's than in the 1880's. While the trend of strikes tends to follow the business cycle, there has been less strike activity in some years of prosperity than in depression years. Page 1047.

Retail Cooperatives, 1936.

There were approximately 3,600 retail cooperative associations, with some 677,000 members, in the United States at the end of 1936. The total business of these associations in 1936 amounted to about $182,685,000. These estimates are based on reports received by the Bureau in the course of its general survey of cooperatives. Nearly $5,000,000 was returned in patronage refunds on the business done in 1936 by the associations reporting to the Bureau on this point. The cooperative grocery or general store was still the most common form of distributive association, but associations handling petroleum products had increased considerably in number. The store associations were found to be handling a wide variety of commodities, in some cases being able to supply their members with practically everything needed for the household or farm. Page 1068.

Minimum Wage Legislation in Great Britain.

Machinery for fixing legal minimum-wage rates for men and women is provided in Great Britain through trade boards created by law. Certain stipulated conditions determine the trades and occupations to which minimum wages may be applied. The organization of the trade boards, the procedure by which they establish minimum rates, and their enforcement methods are described in an article on page 1085.

Displacement of Labor in Cigar Industry.

During the past 20 years there has been a marked reduction in the consumption of cigars simultaneous with a rapid increase in the use of machinery for their production. As a result of both of these factors, the number of employees in the industry has declined by approximately one-half, and there would have been a still greater decrease had there not been a substantial reduction in the average hours of labor per worker. Perhaps of even greater social significance is the fact that when cigar-making machinery is introduced in a factory it results in the elimination of the skilled, rather highly-paid, hand cigar makers and the substitution of unskilled or semiskilled operators. Page 1100.

Causes of Discrimination Against Older Workers.

Discrimination in employment of middle-aged workers exists in practically all industrial areas of New York State, according to the recent report of the joint legislative committee of that State appointed to investigate the subject. Among the alleged causes for this discrimination are increased accident-compensation and group-insurance rates; the greater susceptibility of older workers to occupational diseases; increased rates for employers under pension plans; speed-up in industry; the elimination of middle-aged workers by technological changes; the belief that younger men may be hired more cheaply, are trained more readily, and are more efficient; the public demand for young people in certain occupations; the failure of employers to train employees for middle-aged usefulness; and the age limits for appointments to Federal, State, and municipal services. Page 1138.

Housing and Health.

Minimum housing standards for protection of the health of tenants are laid down in the preliminary report of the American Public Health Association's Committee on the Hygiene of Housing. To provide proper housing facilities, the committee believes problems of management as well as of construction and planning must be dealt with. The recommendations deal with temperature control, ventilation, light, noise, precautions against overcrowding, and provision for personal cleanliness and performance of household tasks under simplified conditions. Page 1150.

Earnings in Ammunition Industry.

Average hourly earnings in the ammunition industry amounted to 58.7 cents in October 1937, according to a survey made by the Bureau of Labor Statistics. The employees worked an average of 40.4 hours per week, with resulting weekly earnings of $23.71. Almost one-half the working force consisted of females. The ammunition industry includes establishments engaged primarily in the manufacture of ammunition for small arms and of blasting and detonating caps. Establishments operated by the Federal Government were not included in the survey. Page 1214.

Sickness Insurance in Norway.

Compulsory insurance against sickness has been in force in Norway since 1911. The system is based on municipal sickness-insurance funds, although some private funds have been set up by large industrial enterprises for their employees. The coverage of the system includes all persons 15 years of age or over whose wages do not exceed an amount fixed by the Crown, the present limit being 6,000 kroner per year. The benefits include daily cash payments, medical attendance, various types of special treatments, a certain amount of dental care, hospitalization, maternity care, and medical care for dependents of insured persons. In 1936, more than 900,000 persons were insured in the local public funds and the recognized private funds, and a total of nearly 48 million kroner was expended for benefits. Page 1122.

MONTHLY LABOR REVIEW

FOR MAY 1938

REVIEW OF STRIKES IN THE UNITED STATES [1]

By FLORENCE PETERSON, *Bureau of Labor Statistics*

INDUSTRIAL disputes in the United States coincide with the beginning of our national history. In 1776, while New York City was occupied by British troops, the printers demanded a wage increase from their employers and were refused. They thereupon ordered a "turn-out" and forced their employers to grant the increased wage.

The first recorded strike for a 10-hour day was called by carpenters in Philadelphia in 1791. The carpenters lost the strike and in retaliation organized a cooperative and contracted for jobs 25 percent below the current rate.

The most notable strikes of this early period were those conducted by journeyman shoemakers of New York and Philadelphia. A strike of shoemakers in 1805 resulted in the first attempt by employers of this country to invoke the aid of the courts. Leaders of the strike were prosecuted, under the English common-law doctrine, for criminal conspiracy. In spite of vigorous defense and appeal to public opinion, the jury found them "guilty of a combination to raise their wages." In 1809 New York shoemakers called a strike against one company and later, suspecting that this company was secretly getting work done at other shops, they called a general strike. The leaders of this strike were indicted for employing unlawful means to gain increased wages, but were fined only $1 each and costs.

The first known strike in which women participated was among contract workers in Pawtucket, R. I., in 1824, when "female weavers" struck with the men in an attempt to resist a reduction in wages and increase in hours. A strike of women alone, the tailoresses of New York for higher wages, occurred in 1825.

The first recorded strike of factory operatives was called by textile workers in Paterson, N. J., in 1828. This was also the first known instance of the calling out of militia to quell a labor disturbance.

Not only did the period from 1776 to 1830 witness a considerable number of industrial disputes in comparison with the relatively few persons working for wages at that time, but the causes of these strikes

[1] A summary of the early strikes, together with a complete report on all available strike statistics from 1880 to 1936, is given in Bureau of Labor Statistics Bull. No. 651 shortly to be issued. This bulletin also includes a discussion on the Bureau's method of collecting and analyzing strike data.

and the tactics pursued by the strikers and the employers bear close similarity to those existing today. These years saw the introduction by the workers of the walking delegate, strike benefits, the use of the general strike when an individual strike proved ineffective, picketing, social ostracism and sometimes physical violence toward "scabs," and the use of the militia and the courts by the employers and public authorities.

In general, there were at least two differences between the strikes in this early period and those of later date. First, practically all the early strikes occurred among hand craftsmen. This, of course, merely reflected the nature of industrial processes at that time, since factory production, even in textiles, was just getting a foothold. Second, with the exception of the shoe workers and printers, the strikes were spasmodic walk-outs of unorganized workers, or workers who organized expressly for the strike, the organization disbanding after the strike. Permanent, stable labor organizations existed only among the printers and shoe workers in the larger cities.

Strikes from 1830 to 1870

During the middle of the 1830's there seems to have been an unprecedented number of strikes which caused no little alarm among employers and the public. "The times," said the Philadelphia Gazette of June 8, 1835, "are completely out of joint * * *. Our streets and squares are crowded with an idle population. Some manifestations of violence have already taken place; * * *. Our buildings are at a stand, and business generally is considerably impeded." The New York Daily Advertiser, issue of June 6, 1835, observed that "strikes are all the fashion" and that "it is an excellent time for the journeymen to come from the country to the city."

Two chief causes of the strikes of this period were the growing insistence on the part of the workers for the 10-hour day, and the rise in cost of living resulting from the inflation and speculation which took place in 1835–36.

An instance of the employers' use of the boycott occurred in 1836, during the strike of bookbinders in Philadelphia. The employers issued a list of the strikers for publication throughout the country, advertised for bookbinders in other cities, and agreed with book sellers that they would give no work to any master binder who employed members of trade-unions.

The depression lasting from 1837 until the gold discoveries of 1849 practically destroyed aggressive trade-unionism and discouraged the calling of strikes. During the early fifties there were numerous strikes for wage increases, closed shop, shorter hours, abolition of night work, greater frequency and regularity of wage payment, substitution of cash pay for store scrip, and restriction of apprentices. Because labor

was organized somewhat better, and also because of the prevailing prosperity, a good many of these strikes were successful.

Unemployment became so severe during the last half of the decade, as a result of two depression periods—one in 1854–55 and the more serious one of 1857—that strikes as well as trade-unions practically disappeared.

A strike of Lynn shoe workers in 1860, which spread throughout the shoe area of Massachusetts, brought about the largest labor demonstrations which Massachusetts had experienced up to that time. Nevertheless, the strike failed, the employers filling many of the strikers' places with workmen from Maine and New Hampshire.

In spite of rapidly rising prices, there were comparatively few strikes during the Civil War years. Coal miners engaged in a number of strikes, most of which were successful because of the rise in price of coal. The majority of the strikes in other industries were not successful in bringing about increased wages or shorter hours.

In 1865 the iron manufacturers of Pittsburgh locked out the puddlers when they demanded a wage increase. This dispute was settled by arbitration, the earliest recorded wage arbitration case in the United States.

The Iron Molders' International, the strongest labor organization of that time, called a strike in Cincinnati in 1867 against a 60-percent wage reduction announced by the National Stove Manufacturers' and Iron Founders' Association, the first national employers' association in this country. The strike lasted 9 months, and the strike benefits paid almost broke the union's treasury. The failure of this strike and of a strike in Pittsburgh a few months later led the union to discourage strikes and turn its attention to cooperatives.

Strikes from 1870 to 1900

Beginning about 1870 there was a strong revival of national labor unions. For a few years preceding the depression of 1873 these unions demanded and frequently obtained increased wages and reductions in hours. The recently organized Order of St. Crispin (shoe workers) called a number of strikes during the latter part of the sixties and early years of the seventies. Many of these were successful. During one in 1870, however, New England shoe workers received their first threat of competition with low-wage orientals when Chinese coolies from California were imported into Massachusetts as strike-breakers. A strike of 100,000 workers in New York City in 1872, the largest dispute up to that time, resulted in the 8-hour day for practically all the building trades as well as for a few other trades.

The latter part of the 1870's was characterized by defensive strikes—a desperate effort to stave off wage reductions which followed in the

wake of the business depressions of 1873 and 1877. Strikes were particularly prevalent among shoe workers, cigar makers, and textile and iron workers. The numerous strikes of textile workers in Fall River against periodic wage cuts were uniformly unsuccessful. Employers filled vacancies with French-Canadian immigrants, and as the price of reemployment strikers were forced to sign agreements to join no labor organization.

In 1873 a strike of New York cigar makers against one large concern stimulated employers throughout the city to scatter their work among small tenement-house shops. Four years later the cigar workers' union called a strike against this system. Although it attracted wide public attention to the evils of the sweatshop system, the strike was lost.

There were many bitter strikes in the bituminous-coal mines, particularly in Ohio. Very few met with any degree of success. A 7-month strike of anthracite miners against wage reductions in 1874 resulted in the breaking up of the trade-agreement system which had existed since 1869, the dissolution of the once powerful Workingmen's Benevolent Association, and the revival of the Molly Maguires. The latter association was finally crushed in 1876.

The year 1877 is generally referred to as the year of "the great railroad strikes." Starting on the Baltimore & Ohio Railroad, they quickly spread to most of the lines operating from St. Louis to the Atlantic seaboard, being confined, however, largely to freight lines. While the basic general cause was the successive reductions in wages which had been made during preceding years, other reasons for discontent were the irregularity of employment, delay in payment of wages, and introduction of the double-header freight trains of 34 cars instead of the customary 17 and the consequent displacement of engineers. These railroad strikes were marked by much violence and property damage. For the first time in this country Federal troops were called out in time of peace to quell strikes. All of these railroad strikes failed in bringing any immediate gains to the workers.

During the first part of the 1880's strikes were comparatively infrequent. The most important was the telegraphers' strike in 1883, which involved the majority of the commercial telegraphers of the country. Following the depression of 1884–85, there was a Nation-wide wave of strikes. Many of these were sympathetic strikes, the Knights of Labor at that time being prone to call out workers in various trades to aid strikers in other plants. Some of these disputes were the result of the great mass movement for the 8-hour day which was inaugurated at this time.

During 1885–86 there were several large railroad strikes, confined mostly to the shopmen of the railroads in the Southwest—the Missouri-Pacific (Gould) System. In 1886 occurred the Haymarket riot and

strikes and lock-outs in the meat-packing industry in Chicago, which were chiefly over the issue of the 8-hour day.

The number of strikes declined in 1888–89. Many of those which took place were of a defensive character. Trades which had been successful in their strikes for the 8-hour day were now forced to strike against a return of the longer day. There were almost as many strikes against hour increases and wage decreases as there were for a reduction in hours and increases in wages.

The 8-hour day campaign was renewed in 1890–91, especially in the building trades, and strikes multiplied. There were a number of strikes in the steel industry in 1892, including the well-known Homestead strike where a pitched battle between strikers and Pinkerton detectives, hired by the Carnegie Steel Co., resulted in a number of deaths and serious injuries. Most of these steel strikes were lost, resulting in a gradual elimination of the union in practically all of the large steel concerns in the country.

On the whole, there was a decrease in strike activity during the depression of 1893–98. However, some of the bitterest and most violent strikes took place during these years. One of them was the 1893–94 strike at Cripple Creek, Colo., which originated over the 8-hour day issue. Before the strike was settled there was a virtual state of civil war throughout the mining regions of Colorado. Several skirmishes took place between miners and a private army of deputies organized by the employer, before the Governor with the help of the National Guard was able to restore peace.

There were more persons involved in strikes in 1894 than there had been in any previous year. A large portion of these were in coal mining and in shops of the Pullman Palace Car Co., in protest against wage reductions. The Pullman strike was called by the American Railway Union, an industrial union organized by Eugene Debs. Many railroad workers went on strike in sympathy with the Pullman employees, although the railroad brotherhoods were opposed to the strike. The strike is significant in labor history because of the numerous injunctions issued by the Federal courts upon the initiative of the Department of Justice and because President Cleveland sent United States troops to Chicago in spite of the protest of the Governor of the State.

In 1897 the United Mine Workers won a general bituminous-coal strike which brought wage increases and an 8-hour day in most of the central competitive fields.

Strikes from 1900 to the World War

Strikes increased with the return of industrial prosperity and the expansion of labor organizations in 1899 and the first years of the twentieth century. Many of these, as was to be expected after a

long period of wage reductions, were for wage increases, although union recognition became an increasingly important issue. About as many workers were involved in union-recognition strikes between 1900 and 1904 as were involved in wage disputes.

One of the major issues in the anthracite strike in 1900 was recognition of the union. Although wage increases and other concessions were granted, formal recognition was not given to the United Mine Workers of America, and this, together with demands for a wage increase and hour decrease, brought on the anthracite strike of 1902. This 5-month strike was terminated when the operators agreed to arbitration by the Anthracite Coal Strike Commission appointed by President Theodore Roosevelt. The Commission's award granted wage increases, hour reductions, and changes in working conditions, but did not grant outright union recognition. Through the system of conciliation and arbitration established by the award, however, recognition of the union was gradually obtained without any serious strikes.

A second serious strike occurred among the miners in the Colorado Cripple Creek region during 1903–4. Disappointed by the invalidation of the State's 8-hour law by the State supreme court, the miners turned to the Western Federation of Miners, which was then affiliated with the Industrial Workers of the World. When employers refused recognition and discharged a number of union members, strikes broke out which intermittently affected most of the miners in the State throughout 1903 and most of 1904. These disturbances were characterized by the use of private deputies and State militia, injunctions, deportations, and blacklisting.

The depression of 1907–8 discouraged strike activity. Following this depression there were a great many industrial disputes in the textile, iron, and mining industries. In 1910 the clothing workers of Chicago engaged in a city-wide strike, which resulted in practically no gains except at Hart, Schaffner & Marx, where an agreement was made which established the first arbitration board in the industry.

In 1911 there were numerous strikes among railroad shopmen in Chicago and on roads west and south of Illinois. The structural-iron workers, in their efforts to get recognition, engaged in numerous strikes. During one of these the Los Angeles Times Building was dynamited. This was the climax of numerous disturbances in this area in which the Los Angeles Times had vigorously taken sides with the employers. The McNamara brothers, officers of the Structural Iron Workers' Union, were indicted and confessed to this dynamiting. In 1912–13 there were continuous strikes in the West Virginia coal fields for union recognition and the same working conditions as the United Mine Workers had obtained in the central competitive field.

The I. W. W.'s organizing drives in the eastern textile and clothing centers led to numerous strikes, the most important being those in

wool textiles at Lawrence, Mass., in 1912, and in the silk mills in Paterson, N. J., in 1912–13. Wage increases were won at Lawrence, but the Paterson strike, for the most part, brought no gains to the workers. At about the same time the New York and Philadelphia clothing workers struck for an 8-hour day and union recognition. A majority of the shops signed union agreements.

The depression of 1914 discouraged much strike activity, although one of the widely known strikes occurred that year—the strike against the Colorado Fuel & Iron Co. This strike was called by the United Mine Workers for union recognition, wage increases, and changes in working and living conditions. The strikers, ejected from company houses, settled in tent colonies on adjacent land. Militia set fire to one of these colonies, the Ludlow camp, and this became known as the "Ludlow massacre."

In 1915 clothing workers in Chicago again struck against all the manufacturers except Hart, Schaffner & Marx. Although the attempt to bring this market center under contractual relations failed, the unions' shop chairmen were recognized in individual plant settlements.

War and Post-War Period

It was not until late in 1915 that American business generally began to feel the effects of the war in Europe. With the rising prices and the increasing need for labor, industrial disputes more than doubled in 1916 and reached a peak of 4,450 in 1917. A large proportion of the wartime strikes occurred in the building and metal trades, in the shipyards, and in the lumber, coal, copper, and transportation industries. Textile and clothing strikes also were more numerous than usual.

The most serious strikes, as far as the conduct of the war was concerned, were those which took place at Bridgeport, Conn., and in the northwest lumber industry. The latter, which tied up the entire northwest lumber industry during the greater part of 1917, were primarily for the 8-hour day, although wages and working conditions were important factors. In spite of appeals from the Secretary of War and the President's Mediation Commission, the Lumbermen's Protective Association refused the hour reduction, even going so far as to pledge itself to discriminate against any member who would grant the 8-hour day. Finally, in the spring of 1918, the basic 8-hour day was granted. It was at this time that the Loyal Legion of Loggers and Lumbermen was organized. The machinists' strikes in the munition factories at Bridgeport were for wage increases and against union discrimination. A number of Government agencies intervened to settle these strikes, but dissatisfaction continued throughout the war, although some wage increases were granted. In lieu of trade-

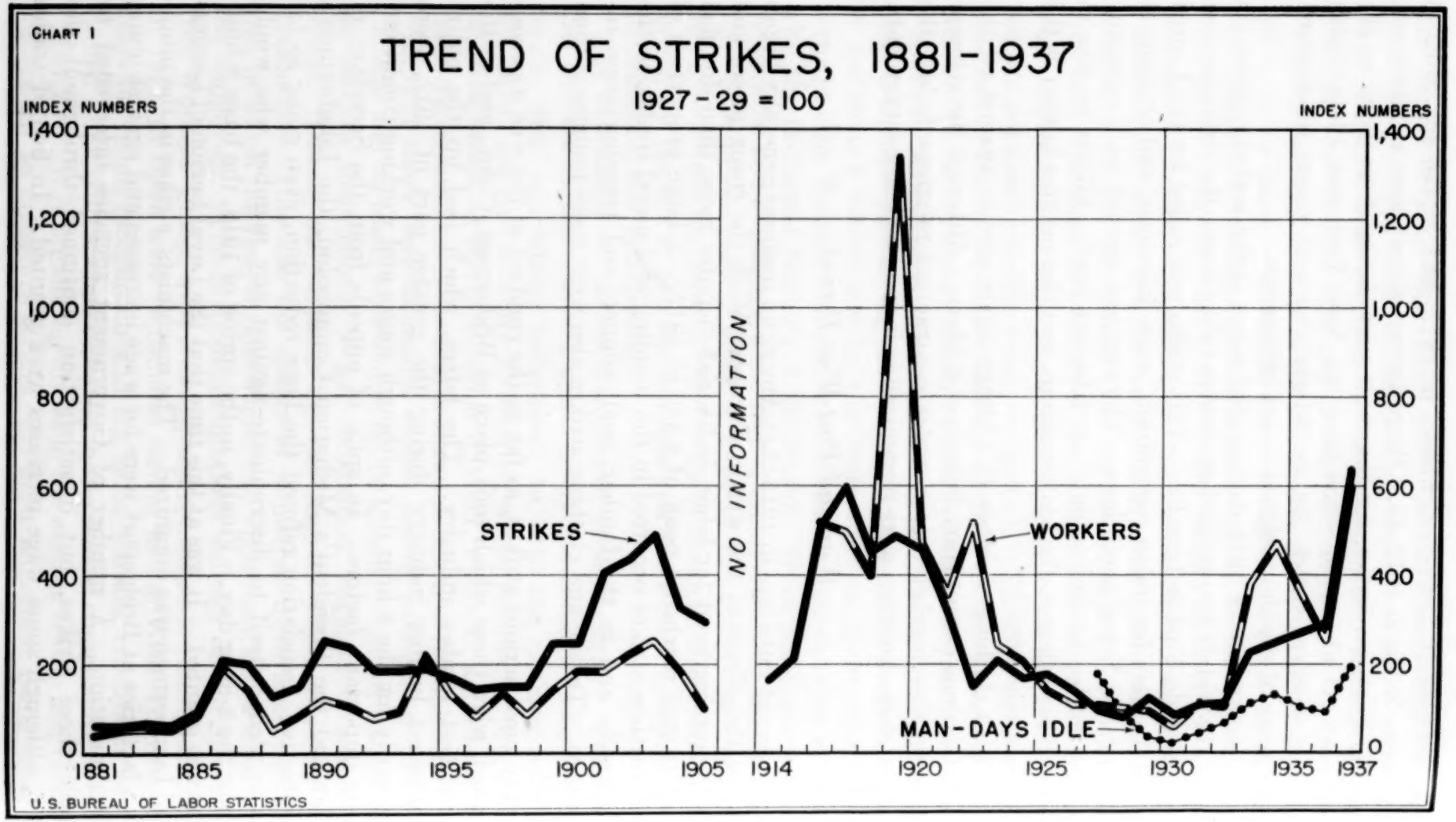


CHART 1
TREND OF STRIKES, 1881-1937
1927-29 = 100
INDEX NUMBERS
INDEX NUMBERS
1,400
1,200
1,000
800
600
400
200
0
STRIKES
NO INFORMATION
WORKERS
MAN-DAYS IDLE
1881
1885
1890
1895
1900
1905
1914
1920
1925
1930
1935
1937
U.S. BUREAU OF LABOR STATISTICS

union recognition, an elaborate employee-representation plan was established by the War Labor Board.

Numerous as the wartime strikes were, they were of comparatively short duration and did not involve, on the average, a large number of workers. This, no doubt, was due to the numerous Government labor boards which were established to maintain industrial peace for the duration of the war.

Over 4 million persons were involved in the strikes of 1919, the largest number of workers ever involved in strikes in any one year. The chief causes of these widespread disputes were the rising cost of living, which by 1920 was twice as high as in 1914, and the determination of trade-unions to extend further the influence of union organization in areas in which they had obtained a foothold during the war.

The first general or city-wide strike of any size which had ever occurred in the United States took place in Seattle in 1919. It was estimated that 60,000 workers engaged in this strike (February 6 to 11), which was called in sympathy with the metal-trades workers in the local shipyards. During this same year the policemen of Boston, dissatisfied over wages and working conditions, formed a policemen's union and affiliated with the American Federation of Labor. When a number of them were discharged for joining the union, the entire police force went on strike. During this strike there was considerable public reaction against Government employees joining unions which permitted strikes. There were a number of telephone strikes during the summer of 1919, most of which resulted in wage increases. One practically cut off telephone communication throughout New England for 6 days.

Strikes in the men's clothing industry in New York resulted in the general adoption of the 44-hour week throughout the country in the shops of the members of the National Association of Clothing Manufacturers.

The largest strikes occurring during 1919 were in steel and bituminous-coal mining. The steel strike, in which 367,000 workers were involved, was primarily for union recognition. This strike was lost, the men gradually returning to work without a formal settlement. An indirect result of this strike, however, was the substitution of the 8-hour for the 12-hour day. While this controversy was still in progress a strike was called in the bituminous-coal industry. Approximately 425,000 miners were involved, tying up 75 percent of the industry. The chief cause of this strike was a failure to get a new agreement with wage advances in line with the increased cost of living. After 3 months the men returned to work, accepting President Wilson's compromise for a 14-percent wage increase and a promise of further investigation of wages and prices of coal. The Bituminous Coal Commission later awarded a 27-percent increase.

U.S. BUREAU OF LABOR STATISTICS

Although there were no such large disputes in 1920 as there had been during the preceding year, the total number of strikes remained at a high level. A large proportion were for wage increases. The strike involving the largest number of persons was a week's strike of 100,000 anthracite miners in a futile protest against the 17-percent wage-increase award of the Anthracite Coal Commission, instead of the 27 percent which the miners felt was due them on the basis of increased cost of living. There were also a number of sporadic strikes, especially in Illinois and Indiana, among bituminous-coal miners for an increase for day workers in excess of that allowed by the Bituminous Coal Commission. These strikes were not sanctioned by the United Mine Workers of America, which insisted that the strikers return to work. When work was resumed, President Wilson called a conference of the joint scale committee of the operators and miners of the central competitive field. When this conference failed to agree as a unit on the amount of increase to be granted, separate rates were set for each State.

Discontent with wages which had not been adjusted to rapidly increasing cost of living resulted in numerous railroad strikes, many of them unauthorized by the brotherhoods. Increasing chaos on the railroads hastened the appointment by President Wilson of the Railroad Labor Board, as provided by the 1920 Transportation Act. In July this Board granted a general wage increase.

Post-War Depression

The wage issue was sharply reversed in 1921 when cost of living dropped about 17 percent from its high point in 1920. During this year there were almost 1,000 strikes in protest against wage decreases. The largest strike during 1921 was that of 140,000 marine workers in all the principal ports in protest against a 15-percent general reduction promulgated by the United States Shipping Board. This strike not only was lost but caused further dissension within the Seamen's Union, especially on the Pacific Coast.

The printers' unions engaged in an unprecedented number of strikes in their drive for a 44-hour week. An evidence that many of these strikes were successful is the fact that the index of union hours in book and job printing dropped 8 percent in 1921.[2]

There were less than half as many strikes in 1922 as in 1921, although the number of workers involved in strikes was 50 percent greater. The decrease in strikes was most marked in the building trades, where the number dropped from 583 to 113.[3] The increase in the number of

[2] Bureau of Labor Statistics. Bull. No. 631: Union Scales of Wages and Hours in the Printing Industry, May 15, 1936. Washington, 1937.

[3] The depression did not affect wages in the building trades until agreements were being negotiated in the spring of 1922. Average wage rates then dropped about 6 percent but were largely restored in 1923. See Bureau of Labor Statistics Bull. No. 626: Union Scales of Wages and Hours in the Building Trades, May 15, 1936, Washington, 1937.

persons involved was largely due to the strike of 400,000 railroad shop craftsmen, and to strikes throughout the coal industry which involved a total of 600,000 miners.

The railroad shop craftsmen's strike was originally called in protest against wage reductions ordered by the Railroad Labor Board. During the progress of this strike other matters than the wage question assumed importance. A sweeping injunction was issued which practically forbade every traditional strike activity carried on by unions. The loss of prestige which the Railroad Labor Board suffered during this strike contributed to its abandonment soon afterward. Many company unions were established in the railroad shops during the course of this dispute.

Prior to the 1922 strike in the bituminous-coal industry, the collective-bargaining arrangements which had existed in the central competitive field since 1898 were seriously threatened when coal operators in western Pennsylvania and Ohio declined to attend the biennial conference to negotiate a new agreement, and announced drastic wage reductions (31 to 46 percent) and abolition of the check-off. The anthracite miners and operators were also in disagreement, the former asking for a 20-percent wage increase and the latter a 21-percent wage reduction. Negotiations having failed by April 1, the miners called a general strike. This was the most complete response to a strike call in the history of mine strikes, with anthracite and bituminous miners for the first time going on strike simultaneously. In spite of intervention by the President and governors of the affected States, the strike continued throughout the summer. It was comparatively free of disorder except at Herrin, Ill., where a number of persons were killed when strikebreakers were brought in from Chicago. Both bituminous coal and anthracite miners returned to work in August, when agreements were reached to maintain the status quo and to negotiate further after a Federal commission appointed by the President had made a thorough investigation of the entire industry.[4]

In January 1922 a general textile strike, which involved 60,000 workers in cotton and woolen textile mills, was called throughout New England in protest against a general 20-percent wage reduction and increase in hours from 48 to 54 per week in some Rhode Island and New Hampshire plants. In Rhode Island there was a good deal of violence in clashes between the strikers and State militia and policemen. By September many mills were reopened when wage reductions were restored. Where mills refused to go on the 48-hour week the strike continued until November, when the United Textile Workers of America called off the strike with the promise to their members that

[4] As a result of this agitation Congress, on September 22, 1922, passed a law creating the United States Coal Commission, whose duty it was to investigate all phases of production, transportation, and distribution of coal and all organized and other relations among operators and miners with a view to recommending remedial legislation.

the fight for the 48-hour week would be taken up in the legislative halls of the State.

Strikes from 1923 to 1933

Although the number of strikes increased in 1923, there were less than half as many workers involved as in 1922. Most of this increase was due to strikes for higher wages, indicating an effort to regain some of the wage losses of the 1921–22 depression. Beginning in 1924 there was an almost steady decline in the number of strikes each year until, in 1928, there were fewer strikes than there had been in any year since 1884.[5] The most noticeable decline in strikes was in the metal trades, which dropped to around 50 from a war peak of over 500; in the printing trades where strikes declined from over 500 in 1921 to about a dozen a few years later; and in transportation, where strikes decreased from over 300 during the war to 7 and 8 in 1925 and 1926.

The total number of workers involved in strikes during these years was also small, in spite of the fact that there were several large strikes. The largest was the 1927 strike of 165,000 bituminous-coal miners, which started in April and continued through the rest of the year. In 1928 there was another protracted strike in the bituminous-coal industry, although this did not involve as many workers as the 1927 strike. The failure of these strikes resulted in a drastic loss in membership in the United Mine Workers of America and the virtual abandonment of the central competitive field as a basic unit for wage negotiations.

During 1929, a peak year in business activity, there was some increase in the number of strikes but they were all small disputes, the total number of workers involved being less than in preceding years. The increase in strikes was largely in textiles and clothing, almost half the total persons involved during 1929 being confined to these two industries.

Beginning with the depression in 1930, the number of strikes declined and remained low during the following three years. Strike activity was at a minimum in 1930. The rapid recession of business activity discouraged strikes for wage increases. At the same time comparatively few wage cuts were put into effect that year. By 1931 and 1932 wage reductions became general and protest strikes became more numerous, practically half of the strikes during these years being in protest against such wage reductions.

Compared to previous years, a relatively large number of these strikes were called by independent unions as, for example, the Amalgamated Clothing Workers, the National Union of Textile Workers, the Needle Trades Workers' Industrial Union, and the National Miners' Union, which were not then affiliated with the A. F. of L.

[5] This ignores the period 1906–13, for which no figures are available.

The N. R. A. Period

The first year of recovery and the impetus for increased labor activity resulting from the National Industrial Recovery Act doubled the number of strikes in 1933. During that summer, for the first time in 10 years, there were more than 200 new strikes each month, and, for the first time since 1922 there were more than 1,000,000 workers involved in strikes throughout the year. There were 17 strikes during the year involving 10,000 or more workers.

Whereas during the preceding depression years there were four times as many strikes in protest against wage decreases as for wage increases, in 1933 there were almost five times as many strikes for wage increases as against reductions in wages. Strikes for union recognition also increased, almost one-third of the 1933 strikes being over questions of union organization.

The largest strikes in 1933 occurred in the various branches of the clothing industry and in mining. In those branches and regions where the clothing workers were already organized, the strikes were for more satisfactory wages and hours, as, for instance, the New York ladies' garment and cloak and suit strikes. The walk-out of 50,000 employees in men's clothing plants in the tri-State New York area and Maryland was a successful strike for union recognition, as was also the strike of 15,000 dye workers in New Jersey. Strikes against silk manufacturers in New Jersey and Pennsylvania, on the other hand, failed to obtain recognition (gained 4 years later) but brought some wage concessions.

Prolonged mining strikes during 1933 in Pennsylvania and West Virginia for the most part failed to gain outright recognition. Strikers returned to work when employers promised to adopt the standards provided in the code of fair competition established under the National Industrial Recovery Act.

There was a moderate increase in the number of strikes during 1934, with a larger proportion (45.9 percent) due to disputes over union recognition, discrimination, closed shop, etc. These were the dominant issues in the numerous coal strikes in Alabama, West Virginia, and Kentucky, some of which were successful. The strike of 30,000 New York taxicab drivers brought some wage increases, but union recognition was not gained until late in 1937.

Several large strikes of anthracite miners during 1933, 1934, and 1935 were caused by rivalry between the United Mine Workers of America and a recently organized insurgent group, the United Anthracite Miners of Pennsylvania. In October 1935 the latter merged with the United Mine Workers and no more of these disputes took place.

The two outstanding strikes in 1934 were those of the San Francisco longshoremen, which brought on a 2-day general sympathy strike of

all organized trades in the San Francisco Bay area, and the general textile strike which involved 309,500 textile workers in 20 States and 66,000 hosiery and other workers who called 1-day strikes in sympathy. The textile strike, which was primarily over recognition and the "stretch-out" system, brought few gains other than the promise of a thorough investigation of the textile industry by a special committee appointed by the President. The prolonged and bitter longshoremen's strike resulted not only in recognition and wage and hour adjustments for all ports on the Pacific Coast, but the system of hiring halls set up under the arbitration award led to a virtual closed shop..

Union organization continued as the dominant issue in a large proportion of the strikes which occurred during the early months of 1935. Some of these strikes were directed against company unions and for trade-unions, some for union recognition in plants or industries into which union influence had never before penetrated, and some for a return of union recognition which had been lost during the depression.

The Chevrolet and Fisher Body strikes in 1935 at Toledo and Cincinnati, primarily against the representation plans set up under the Automobile Labor Board, were a harbinger of the more widespread automobile strikes which followed 2 years later. Strikes throughout the lumber and sawmill areas of Washington and Oregon were directed against the Loyal Legion of Loggers and Lumbermen, a joint employer-employee organization established during the war, and for recognition of the A. F. of L. Sawmill and Timber Workers' Union. Compromise settlements were effected in most instances.

Strikes among white-collar and retail workers grew to significant numbers during the latter part of 1934 and early months of 1935. The 1-year old Newspaper Guild called its first strike, which resulted in a signed agreement with the Newark Morning Ledger. There were a number of large department-store and chain-grocery-store strikes, in only a few of which union recognition was obtained. Some of the dental technicians in New York, St. Louis, and elsewhere, who went on strike, obtained signed contracts and reductions in hours and better working conditions.

Post N. R. A. Period

In 1933, with the beginning of business recovery, about 42 percent of the strikes were for wage increases and hour decreases and about 13 percent against wage decreases. During the next year, 33 percent of the strikes were for wage increases and hour decreases and only 6 percent were in protest against wage decreases. About this same proportion continued until the first month after the invalidation of the N. I. R. A.[6] when, for the first time since 1932, there were almost twice

[6] *Schechter* v. *United States*, 295 U. S. 495 (May 27, 1935).

as many strikes in protest against wage decreases as for wage increases. While such protest strikes slightly declined during succeeding months, the proportion for the year (1935) was comparatively high—about 60 percent as many as for wage increases and hour decreases. Less than half of these protest strikes succeeded in staving off wage reductions and increased hour schedules. However, the largest strike in 1935, that of 366,000 bituminous-coal miners in 23 States, was successful in obtaining increased wages.

Although there were a few more strikes in 1936 than in 1935, there were 29 percent fewer workers involved and 10 percent fewer man-days' work lost. The decline in the number of workers involved in 1936 as compared with the two previous years was mainly due to the fact that there were no extremely large strikes during the year, whereas in September 1935 there was the short but widespread strike of bituminous-coal miners, and in September 1934 there was the general textile strike. There were only 8 strikes in 1936 which involved as many as 10,000 or more workers.

Strikes over questions of union organization increased, such strikes amounting to half the total, including an equal proportion of all workers involved in strikes during 1936. Over half of these organization strikes were successful and another quarter resulted in compromises.

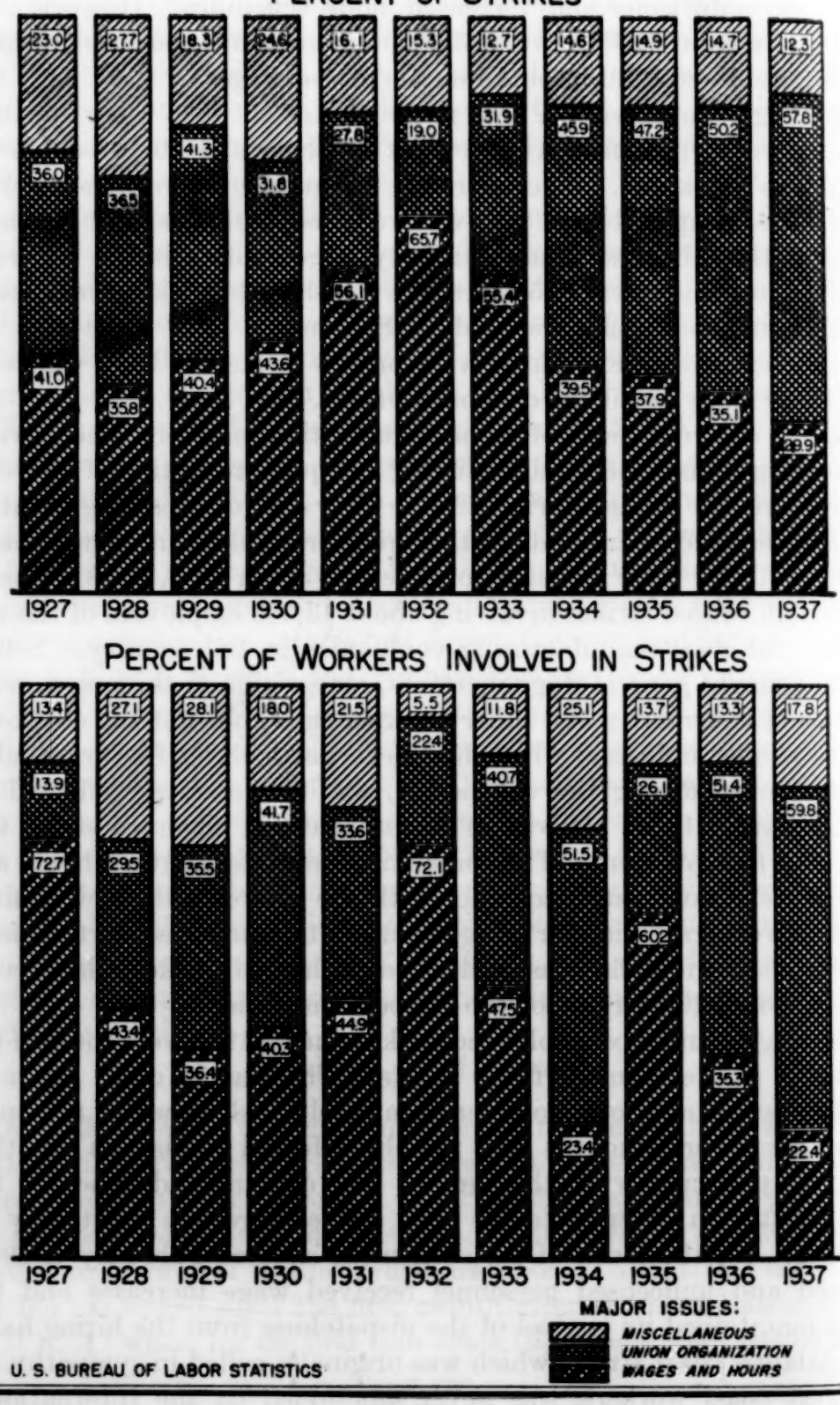
Demands for wage increases, preferential union shop, and the check-off system caused strikes involving about 13,000 employees of the two largest flat-glass manufacturing companies in the country. Settlements brought general wage increases, recognition of the union, readjustments in seniority and other working rules, but not the check-off.

The rubber industry, which had been particularly free from labor disputes even during the war period, was first seriously affected by strikes during 1936. It was in Akron that the sit-down strike was first used to any extent. The companies' desire to lengthen hours and reduce piece-work rates, together with the desire of the new United Rubber Workers' Union for recognition, led to numerous short, departmental sit-down strikes, as well as to prolonged strikes which completely closed the largest of the rubber companies.

The largest and most prolonged strikes during 1936 were those of the maritime workers on all three coasts. The Pacific coast strike of 37,000 seamen and longshoremen completely tied up water transportation for several months and thereby affected thousands of other workers, particularly in the lumber and canning industries of the Northwest. In contrast to the 1934 strike there was practically no violence. By the terms of the settlement effected February 4, 1937, licensed and unlicensed personnel received wage increases and the union maintained its control of the dispatching from the hiring halls. The Atlantic coast strike, which was originally called in sympathy for the west coast workers, was never sanctioned by the International

CHART 2

MAJOR ISSUES INVOLVED IN STRIKES
1927 - 1937



Seamen's Union and soon developed into a show of strength of an insurgent movement of rank and file members which later developed into the National Maritime Union. No ports on the Atlantic and Gulf coasts were completely tied up, although boat schedules were seriously impaired for several weeks before the seamen returned to work with no formal settlements.

Strikes During 1937

There were more strikes in 1937 than in any year in the Nation's history, although the number in 1917 was almost as great. However, the number of workers involved in strikes in 1937 was less than half that in 1919, although somewhat greater than in any other year. While several industries were particularly affected by labor disputes in 1937, there were no such extensive strikes involving several hundred thousand workers as have occurred in the past in the coal, steel, and textile industries.

The unprecedented number of strikes during the first 11 months of 1937 was due to various factors. Underlying all was the fact that business was on the up-grade. Prices were rising and conditions were favorable for workers to make demands upon their employers.

The direct factor was the accelerated growth on all fronts of the trade-union movement. Trade-unionism, which had become revitalized with the beginning of the N. R. A., made steady progress during the following four years. The passage of the National Labor Relations Act in 1935, and more especially the decisions of the Supreme Court on April 12, 1937,[7] assured hitherto unorganized workers of their right to join the ranks of organized labor and of their right to protection against discimination.

During 1936 the trade-union movement had split, primarily on the method of organization in the mass-production industries. The result was not only an increase in organization activities in the mass-production industries, but vigorous organization drives by both factions throughout all industry. In 1937 the rivalry between the groups resulted in an extension of union activity into hitherto unorganized areas more than in rival contests in already organized fields. An evidence of this is the fact that less than 3 percent of the strikes during 1937 were over the question of which one of the rival organizations should represent any one group of workers.[8]

The use of the sit-down strike, especially during the early months of the year, also tended to increase the number of strikes. The

[7] These decisions which sustained the constitutionality of the National Labor Relations Act were on the following cases: *Jones & Laughlin Steel Corp.*, 57 Sup. Ct. 615; *Fruehauf Trailer Co.*, 57 Sup. Ct. 642; *Friedman-Harry Marks Clothing Co., Inc.*, 57 Sup. Ct. 645; *The Associated Press*, 57 Sup. Ct. 648; *Washington, Virginia & Maryland Coach Co.*, 57 Sup. Ct. 650.

[8] There were, of course, a number of disputes between rival unions which were settled without strike action and through elections held by the National Labor Relations Board.

informality of the sit-down method enabled groups of dissatisfied workers, who were frequently not even organized into unions, spontaneously to call strikes without previous discussion or sanction from trade-union officials.

Automobile industry.—The first strike ensuing from the organization drives into the mass-production industries during 1937 was against the General Motors Corporation. While this strike was confined to 18 plants, employing 48,000 workers, lack of automobile parts seriously impaired or tied up operations in 50 of the corporation's plants employing 126,000 workers in 25 cities. After 6 weeks, during which some plants were occupied by strikers most of the time, the company signed a recognition agreement with the United Automobile Workers of America.

With recognition won at the General Motors' plants, strikes were called on March 8 in 9 plants of the Chrysler Corporation, employing 63,000 workers. These plants reopened on April 6, with union recognition granted. An agreement was signed by the Hudson Motor Car Co. on April 10, after a 5-week strike of 10,000 of its workers. While these strikes against large companies were taking place there were numerous strikes in auto parts, farm equipment, and automobile repair shops, most of which were settled with the signing of union agreements.

A number of more or less extensive strikes followed these first strikes for union recognition in the automobile industry. Most of them lasted less than a day and were not authorized by the union, the strikers contending that the company was not living up to its agreement of nondiscrimination and recognition of the shop steward for settlement of grievances. These sporadic strikes came to a virtual end by August, although as late as November there was a 1-day strike of Hudson workers over the company's lay-off method.

Steel industry.—In March 1937 the United States Steel Corporation agreed to recognize the Steel Workers' Organizing Committee. This action on the part of the largest steel concern encouraged a number of small companies to grant union recognition without strike action. A 36-hour strike of 24,000 employees of the Jones & Laughlin Co. in May was settled when the company agreed to an election under the supervision of the National Labor Relations Board. The election, held several days later, resulted in the recognition of the S. W. O. C.

A serious strike in the steel industry broke out on May 26, at the Republic Steel Corporation, Youngstown Sheet & Tube Co., and the Inland Steel Co. This strike against so-called "Little Steel" spread by June 12 to the Bethlehem Steel Corporation. It involved 90,000 workers and extended into seven States—Illinois, Indiana, Maryland, Michigan, New York, Ohio, and Pennsylvania. It was marked by much violence. Local police forces were augmented with special

deputies and the National Guard was called into several localities. At least 15 strikers lost their lives and many more were injured. Several Governors of the States affected intervened and the Secretary of Labor appointed a special mediation board. All failed to bring about a settlement, the companies definitely refusing to sign any semblance of an agreement. By July most of the plants were reopened with a sufficient number of workers to take care of production requirements.

During the steel dispute the United Mine Workers of America called a strike against mines owned by these steel firms in order to cut off their coal supply. These mines, in which about 10,000 workers were employed, were shut down for about a month.

Other strikes.—There were two city-wide strikes in 1937. On June 7, 15,000 workers in Lansing, Mich., participated in a "holiday" in protest against the sheriff entering homes at 2 a. m. and arresting several men and women for misdemeanor during picketing in connection with a local strike. During the steel strike (on June 23) the Committee for Industrial Organization called a "labor holiday" at Warren and Niles, Ohio, in protest against an injunction restraining strikers from interfering with nonstrikers entering the steel plants.

The newly organized United Shoe and Leather Workers' Union conducted a number of strikes during 1937. One, against 48 shoe plants in Massachusetts, involving 11,500 workers, resulted in a 15-percent wage increase.

A 5-weeks' strike beginning in April and involving 15,000 Alabama miners resulted in obtaining for this area the same increase gained elsewhere by the Appalachian Agreement.

A 2-months' strike of 15,000 workers for union recognition at New York shipyards was terminated by the men returning to work under the same conditions existing prior to the strike, the union later asking the National Labor Relations Board to hold elections.

Under the leadership of the Textile Workers' Organizing Committee, 31,000 silk workers in New York, New Jersey, and Pennsylvania went on strike for recognition and increased wages. Within a few days a group of manufacturers signed a standard agreement with the union. Individual agreements were obtained later from many other employers, these agreements following the standard agreement signed in New York. With these settlements, collective bargaining with more or less uniform agreements was established for the first time in a considerable portion of the silk industry.

Statistics of Strikes, 1880–1937

The first effort of the Federal Government to collect data on strikes and lock-outs was in connection with the 1880 census. This survey by the Tenth Census was on an establishment basis and is not, therefore, comparable to later statistics. For this reason it is not included in

the accompanying table. From 1881 until 1905 periodic surveys of strikes and lock-outs were made, which provide a continuous count of the disputes for that period. Such surveys were dropped during 1906–13 and no statistics are therefore available for this period. Since 1914 the Bureau of Labor Statistics has maintained a continuous reporting service on the number of strikes. No information, however, is available for the number of man-days idle during strikes prior to 1927.

Two major facts are revealed in the accompanying table which shows the trend of strikes from 1881 to 1937: First, the trend of strikes bears no direct relation to the growth of our industrial population. Although the country's wage earners had more than doubled, there were only a very few more strikes in the 1920's than there were in the 1880's. The working population had increased 60 percent between 1900 and 1930, whereas there were over one-half million workers involved in strikes each year around the turn of the century in comparison with an average of only a quarter million 30 years later.

Strikes in the United States, 1881 to 1905 and 1914 to 1937

Year	Number of—		Index (1927–29=100)		Year	Number of—			Index (1927–29=100)		
	Strikes	Workers involved	Strikes	Workers involved		Strikes	Workers involved [1]	Man-days idle	Strikes	Workers involved	Man-days idle
1881	477	130,176	64	42	1914	1,204	[2]	[2]	162	[2]	[2]
1882	476	158,802	64	51	1915	1,593	[2]	[2]	214	[2]	[2]
1883	506	170,275	68	55	1916	3,789	1,599,917	[2]	509	514	[2]
1884	485	165,175	65	53	1917	4,450	1,227,254	[2]	598	495	[2]
1885	695	258,129	93	83	1918	3,353	1,239,989	[2]	451	399	[2]
1886	1,572	610,024	211	196	1919	3,630	4,160,348	[2]	488	1,337	[2]
1887	1,503	439,306	202	141	1920	3,411	1,463,054	[2]	458	470	[2]
1888	946	162,880	127	52	1921	2,385	1,099,247	[2]	321	353	[2]
1889	1,111	260,290	149	84	1922	1,112	1,612,562	[2]	149	517	[2]
1890	1,897	373,499	255	120	1923	1,553	756,584	[2]	209	243	[2]
1891	1,786	329,953	240	106	1924	1,249	654,641	[2]	168	210	[2]
1892	1,359	238,685	183	77	1925	1,301	428,416	[2]	175	138	[2]
1893	1,375	287,756	185	93	1926	1,035	329,592	[2]	139	106	[2]
1894	1,404	690,044	189	222	1927	707	329,939	26,218,628	95	106	178
1895	1,255	407,188	169	131	1928	604	314,210	12,631,863	81	101	86
1896	1,066	248,838	143	80	1929	921	288,572	5,351,540	124	93	36
1897	1,110	416,154	149	134	1930	637	182,975	3,316,808	86	59	23
1898	1,098	263,219	148	85	1931	810	341,817	6,893,244	109	110	47
1899	1,838	431,889	247	139	1932	841	324,210	10,502,033	113	104	71
1900	1,839	567,719	247	182	1933	1,695	1,168,272	16,872,128	228	376	115
1901	3,012	563,843	405	181	1934	1,856	1,466,695	19,591,949	250	472	133
1902	3,240	691,507	435	222	1935	2,014	1,117,213	15,456,337	271	359	105
1903	3,648	787,834	490	253	1936	2,172	788,648	13,901,956	292	254	94
1904	2,419	573,815	325	184	1937	4,740	1,860,621	28,424,857	637	598	193
1905	2,186	302,434	294	97							

[1] The number of workers involved in strikes between 1916 and 1926 is known for only a portion of the total. However, the missing information is for the smaller disputes and it is believed that the total here given is fairly accurate.
[2] No information available.

The second fact revealed in the table is that the trend of strikes since 1881 indicates a general tendency to follow the business cycle. In the main, strikes tended to diminish when business activity de-

clined and job opportunities disappeared. Business recovery was generally accompanied by revival of trade-union activity and industrial disputes. However, this relationship did not occur with year-to-year regularity. There has been less strike activity in some years of business prosperity than in depression years. For instance, in 1894 there were more persons involved in strikes than in the relatively prosperous years preceding the depression of the 1890's. During the 1927–29 period there were fewer strikes than during the depression of 1920–21, or even the prolonged depression of 1893–98. It would appear that other conditions, such as the political situation, the state of mind of the workers, and the type of labor leadership, have as much to do with the amount of strike activity as the purely economic factors of prices and business conditions.

OPERATIONS OF RETAIL COOPERATIVES, 1936[a]

Summary

ON THE basis of the general survey of cooperatives which it recently completed, the Bureau of Labor Statistics estimates that in 1936 there were approximately 3,600 cooperative associations engaged in the retail distribution of consumer goods of various kinds, including such associations as stores, buying clubs, petroleum associations, bakeries, and creameries. These are quite distinct from the associations engaged in rendering various services, such as housing, telephone, electricity, and burial associations, which have been reported upon in previous articles.[1] The total membership of these 3,600 retail distributive associations is estimated to have been about 677,750 at the end of 1936 and their total retail business done during the year $182,685,000. The reports indicate that over 70 percent of the associations were able to effect a net saving for their members on the year's operations and that of these some 48 percent returned patronage refunds.

The above figures include many farmers' organizations engaged in the collective purchase of consumers' goods.

It is recognized that there is considerable difference of opinion as to whether the farmers' organizations which do collective purchasing for their members should be classed as consumers' cooperatives. Even the farm organizations themselves appear to be divided on this point. Many farmers' purchasing associations handle only farm supplies, or producer commodities—goods used only in the productive business of the farm. Whether such associations are consumers' cooperatives is a very moot point. However, insofar as they handle consumer goods—food and other commodities consumed or used by the household—they do unquestionably enter the consumer field. It was for that reason that farmers' organizations doing any consumer business were included in the Bureau's study.

Method of Study

Questionnaires were sent to every retail distributive association known to the Bureau. In this part of the work the Farm Credit Administration cooperated by sending schedules to all of the farmers' cooperatives doing collective purchasing, and made this information

[a] More detailed data are given in Serial No. R. 718.

[1] Housing associations, November 1937 (p. 1146); electricity associations, January 1938 (p. 110); telephone associations, February 1938 (p. 392); and burial associations, March 1938 (p. 647).

available to the Bureau. In addition, field work was done by the Bureau's representatives in all or part of 13 States.[2]

Data were obtained for 1,939 of the 3,264 local distributive associations known to be in existence at the end of 1936. The coverage as to business done was considerably greater than that for number of associations, as the returns include practically all of the larger associations. In view of these facts, the data were felt to be sufficiently inclusive to warrant computation of estimates for the whole cooperative distributive movement.

Allowance was made for undiscovered associations in the proportions that these were revealed by the field work, and for the fact that as most of the larger associations were known to be already covered, the averages for the nonreporting associations would be considerably under the averages for those reporting. On this basis the following estimates were arrived at, as representative of retail distributive cooperation in the United States at the end of 1936: 2,400 store associations (including buying clubs),[3] with 330,500 members and a business of $107,250,000; 1,150 petroleum associations, with 325,000 members and a business of $69,985,000; and 50 other distributive associations (creameries, bakeries, and water-supply associations, etc.), with 22,250 members and a business of $5,450,000.

General Condition of Cooperatives

The Bureau's last previous survey covered the year 1933—at the low point of the depression. In the interval since then, the cooperative distributive movement has had both gains and set-backs. Many associations have gone out of business, but a greater number of new associations have been formed. In general the record is one of slow, quiet expansion, of the strengthening of both local and wholesale associations, and of increasing emphasis upon educational activities. The data at hand indicate that the rate of progress has been very uneven, being greatest where the sense of cohesion and of a definite social and economic aim was liveliest and least among the scattered associations operating on the "go-it-alone" policy. The field work done in the present survey discovered numbers of isolated associations going their own way, making mistakes that could have been avoided if they had been sufficiently in touch with the rest of the movement and had been utilizing the improved methods and other helps available through the central associations.

Such circumstances as the above are those which associations can remedy if they will. Some of the organizations, however, have faced

[2] California, Connecticut, Illinois, Indiana, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New York, Ohio, Pennsylvania, and Wisconsin.

[3] It should be emphasized that this figure does not include farmers' cooperative stores handling feed, fertilizer, and other farm supplies, but no consumer goods. There are hundreds of such associations.

difficulties beyond their control. Thus, the manager of a South Dakota association, in his annual report to the membership made the following comment:

> The 16 years which mark the life of our store have been, in many ways, without parallel in South Dakota history. They have brought deflation, poor crops, low prices, insects, bank failures, dust storms, foreclosures, Government relief, and changed the very fabric of our living.
>
> Yet, despite these disheartening conditions, we have kept going. We are enjoying a profitable trade. We owe no debts. Our store is controlled chiefly by practical farmers. Its stockholders, with few exceptions, patronize the store generously, and are directly interested in its principal purpose. All things considered, we have done exceptionally well.

Two associations are known to have lost their stores by fire; both, however, took immediate steps to acquire a new place of business.

The associations in the textile towns of New England had been very hard hit, with the closing (in some cases, permanently) of the factories upon which the members depended for their livelihood. One organization, visited in the course of the study, which had been started by German textile workers in 1915, had finally given up and was in process of dissolution at the time of the agent's visit in May 1937.

The miners' associations, also, have been through some bitter experiences caused by long-drawn-out strikes, by the depression, and by the closing down of unprofitable or worked-out mines. Some towns—notably in the copper district of Michigan and the coal-mining districts of southern Illinois—now contain a virtually stranded population. One of the oldest cooperatives in the country is located in such a town. At its peak the organization did an annual business of nearly $400,000 and claimed that it had the largest sales of any retail store north of Milwaukee. During the period of its operation it has returned to its members in patronage refunds about 1¾ million dollars. After the war, the prosperity which the town had enjoyed because of the demand for copper ceased abruptly and the place became almost overnight a "ghost town."

An Illinois coal miners' association reports: "This cooperative almost went bankrupt extending credit to the miners during the United Mine Workers and Progressive Miners' Union troubles and has lost money during the years 1932 to 1935." Another miners' association in the same region had adopted the practice of "plowing in" the net earnings, by crediting the patronage refunds to the members' individual accounts and using the money as "loan capital" in the business. This association, whose store was described by the Bureau's representative who visited it as "the best I have seen thus far," operated at a loss in 1936 because the railroad mine upon which most of the members depended failed to pay wages due; individuals lost as high as $800 each, and were unable to pay their bills at the cooperative. The Bureau's representative commented: "Right now this town of

1,000 people is in a pathetic condition. The only mine left is working 1 or 2 days a week and most of the people are on relief or W. P. A. projects."

Because of good management, sound financial judgment, and a loyal membership, many associations have been able to prosper in spite of adverse conditions. Thus, in one Minnesota farming district, in a community in which 13 private stores are reported to have failed since 1915, both the cooperative store and the cooperative gasoline and oil association have flourished. Another cooperative, in Michigan, celebrated its twentieth anniversary in 1937. Its hard-won success has been achieved in the face of an unprecedented depression which kept closed for 4 years the iron mines on which the members depend for their living and which resulted in the closing of all the private stores in the town, leaving the cooperative store in 1937 the sole avenue of trade. During the depression the cooperative doubled its volume of sales.

The Bureau has record of a number of associations which were able to pay patronage refunds every year in spite of the depression. Others which could have done so used the money to strengthen the financial position of the association.

Some gains and some losses have occurred in the legislative field The usual tendency has been toward gradual improvement of the cooperative laws, in the light of the needs of the cooperative movement, as revealed by experience. However, in two States the cooperative statutes have been wiped off the books altogether within the past few years. Thus, the Wyoming Legislature, although the State constitution provides that "the legislature shall provide by suitable legislation for the organization of mutual and cooperative associations," repealed the consumers' cooperative act in 1931, leaving prospective cooperators no special law, either cooperative or nonprofit, under which to incorporate. In the same year the California consumers' cooperative law was repealed and the cooperative associations were specifically made subject to the terms of the general corporation act of the State. In that State, the cooperatives have resorted to various expedients in order to retain their distinctive character as cooperative associations. Some are operating as unincorporated associations (involving unlimited liability to members); others organized under the nonprofit act, thereby having to forego return of patronage refunds not considered permissible under the act, and were therefore operating on the cost-plus basis; and at least one was known to have organized as a fraternal association and was carrying on its business activities through two separate subsidiary organizations.

On the favorable side of the ledger must be recorded three special measures intended to further the spread of public understanding of the cooperative philosophy. In August 1935 the Wisconsin Legisla-

ture passed a measure requiring the giving of courses in agricultural and consumers' cooperation throughout the public-school system of Wisconsin, from the State University downward, and making attendance at such courses a required part of matriculation in economics, the social studies, and agriculture. In 1937 a special session of the Minnesota Legislature appropriated $5,000 to be used in providing educational material on cooperatives for schools and other groups in the State, and in 1938 the Legislature of North Dakota passed a measure similar to that of Wisconsin.

Sponsoring Groups

The groups which have formed the cooperatives now in existence are varied. Among the first organizations to become interested in cooperative purchasing was the Patrons of Husbandry, or the Grange, as it is more commonly known. During the period 1866–79 the Grange stores were found throughout the East and Middle West. Though most of these stores failed during the depression of 1874–78 some of them survived and indeed a few are alive today.

Shortly after 1900, members of the new immigrant groups undertook cooperative activities. Among these were the Lithuanians and the Finns, whose favorite forms of cooperative enterprise at that time appear to have been stores and bakeries. Although the Lithuanian enterprises are not outstanding at present, the Finnish societies form one of the strongest elements in the cooperative movement of this country today. Italian associations have been started here and there throughout the country; it must be said, however, that many of the Italian associations studied by the Bureau of Labor Statistics leave much to be desired as to cooperative philosophy and practice. Other national groups which still have cooperative associations in successful operation include the Slovenians, Czechoslovaks, and Scandinavians. Few of the associations started early in the present century in New England by English textile workers remain. These have been gradually disappearing, one by one.

During the years of the World War, when prices were rising faster than wages, organized-labor groups became interested in the cooperative movement and labor cooperatives began to be established in many places. Especially active in fostering cooperatives were the organized coal miners and railroad workers. Miners' associations were found in many localities in Illinois, Indiana, Ohio, and Pennsylvania. Most of these went down in the general crash of the National Cooperative Wholesale and the depression of 1920–21. A few of the coal miners' stores still remain, especially in Illinois and Pennsylvania, but they have suffered from the recent depression and from the bad conditions in the coal industry. However, one of the most successful

associations now existing in this country is a coal miners' organization in Ohio, which has had a record of continuous expansion and growth.

Other industrial groups with cooperatives in operation include the ore miners (copper and iron) in Michigan and Minnesota; gold and silver miners in Idaho; railroad workers in Kentucky, Michigan, Minnesota, North Dakota, and South Carolina; textile workers in Connecticut, Massachusetts, and North Carolina; and professional and white-collar groups in New York, Illinois, Ohio, and elsewhere.

In the spot studies made for the Bureau of Labor Statistics in connection with the present survey, it was noted that numbers of the new urban associations are those of professional groups and of middle-class persons. Organized labor is taking a new interest in the possibilities of cooperation and in the formation of cooperative enterprises. Church groups are also manifesting a lively and growing interest in cooperation.

Farmers, in their occupational capacity, have been interested in the cooperative method for more than half a century. Although their interest formerly was centered for the most part in the cooperative marketing of their products, they have been taking an increasing interest in the collective purchase of their farm supplies—feed, seed, fertilizer, fencing, machinery, containers, binder twine, etc. From this it has been an easy step, taken more and more generally during the past few years, to the purchase of household supplies, groceries, work clothing, fuel, etc.

In some of the subsistence-homesteads projects sponsored by the Federal Government, the homesteaders have formed cooperative associations to provide themselves with food, farm supplies, raw materials for their productive enterprises, and associations for marketing their products.

College students are turning to cooperation for the provision not only of their textbooks but also, during the past few years, for the provision of meals and lodging, laundry, cleaning and pressing service. It must be said, however, that many of the so-called students' cooperatives are not genuinely cooperative but include supply organizations run by the school for the benefit of the students but not controlled by them; dormitories owned by the school in which needy students are enabled to work out part of their subsistence, etc. As the students' cooperatives are in operation only during the school year and as the membership changes considerably from year to year as upper classmen graduate and new students come in as freshmen, these cooperatives in many cases lapse at the end of the year, a new association being formed, if desired, the next year.

A number of consumer cooperatives have evolved from self-help associations,[4] whose emphasis was on production, to full-fledged consumers' organizations in which the production is carried on as a subsidiary activity.

There are a few cooperatives whose membership is composed entirely or partly of Negroes. They vary considerably in their degree of success, but have usually resulted from the leadership of one especially gifted member or of a small group. As the colored workers are generally among the worst sufferers in time of depression and unemployment, their associations have encountered extremely hard times during the past few years. In at least one case the membership includes a large proportion either on relief or engaged on W. P. A. jobs, and consequently with very low purchasing power. In fact, the association grew out of a "self-help" organization formed among the unemployed, which was given a small grant under the Federal Relief Act of 1933.

Fields of Cooperative Activity

A wide variety of activities is being carried on by the local distributive associations. Although the store selling groceries or general merchandise is still the most prevalent type of cooperative, the associations handling petroleum products are increasing in numbers. These two groups are increasingly overlapping in their functions. The petroleum associations, in the early years of their development, handled gasoline and motor oil only. Later they began to carry automobile tires and then various accessories such as batteries, tubes, etc. Among the latest developments in this field are the addition of certain electrical appliances, such as light bulbs, washing machines, toasters, percolators, fans, and radios for cars and for homes; and now, finally, an increasing number are putting into stock small supplies of groceries. Collective purchase of groceries was reported by the Bureau's agents to be on the increase in farmers' creameries, also.

Some of the general-store associations handle a great variety of goods, including groceries, meats, clothing (work clothing for men, house dresses, limited lines of children's clothing), shoes, notions, dry goods, fuel, hardware, gasoline and motor oil, tires, farm supplies of all kinds, radios, electrical appliances, refrigerators, and washing machines. Although they do not generally carry furniture in stock, usually they will order whatever the member desires. Large numbers of these associations, in towns where there is no cooperative petroleum association, also dispense gasoline and motor oil through curb pumps or separate service stations.

[4] This term is used to designate associations formed among the unemployed, for the production and barter of goods and exchange of services. Articles on these associations have appeared in many previous issues of the Monthly Labor Review; data for 1936 are in preparation.

Unusual forms of cooperative effort revealed by the survey include one association which has no store but operates a trailer truck, taking the goods directly to the members; two associations which run beer taverns; and one which has a beauty parlor. One store association operates a coal mine to supply its members with fuel. Two associations handle artists' and teachers' supplies.

Associations carrying on several lines of activity have been classified, in the present study, according to the principal activity. Thus, an association which reported that its main line of business was the operation of a grocery store was considered as a "store" society, even though it may also have been operating a bakery, a creamery, or a gasoline service station.

In order to avoid confusion it should be noted that the data on creameries cover only those run for the benefit of the consumers of dairy products; they do not include creameries whose function is the processing or marketing of the farmers' milk products, for sale on the market. Also, the water-supply associations included here are purely consumer organizations; there are hundreds of water-supply associations whose business is the supply of water for the irrigation of farm lands, but these cannot be regarded as consumer associations. It should also be emphasized that all of the farmers' associations included were handling some consumer goods.

Many cooperatives, especially the buying clubs, have arrangements with local tradesmen by which services of various kinds (such as cleaning and pressing, laundering, or automobile repair) are made available to their members at an agreed discount. Organizations with such arrangements are here classified according to the principal establishment operated by them or by their chief function (as buying club, store, etc.).

Operating Facilities

Further indication of the variety of cooperative services and of the expansion of individual associations is given in table 1. Operating facilities were reported upon by 766 distributive store associations, 736 petroleum associations, and 17 "other distributive" associations.

These 1,519 associations were running a total of 3,475 establishments of various kinds, including 1,007 stores and 831 gasoline service stations; as will be noticed, many of the farmers' associations carry on their distributive business through warehouses.

TABLE 1.—*Operating Facilities of Reporting Distributive Cooperatives, 1936*

Facility	Facilities of specified kind, operated as—	
	Principal enterprise	Auxiliary enterprise
Retail stores	863	144
Warehouses	143	272
Gasoline and oil—		
Service stations	665	166
Curb pumps	648	196
Bulk stations	821	96
Tank trucks	1,119	115
Fuel yards	56	155
Garages		7
Bakeries	7	7
Creameries	[1] 3	[1] 20
Restaurants and cafeterias		6
Rooming houses		1
Clubrooms		1
Lumber yards		14
Feed mills		8
Water mains	5	
Other	[2] 1	[3] 17

[1] Does not include 1 association which operated milk routes but had no creamery of its own.
[2] Huckster truck.
[3] Includes 1 cheese factory, 1 sausage factory, 2 beer taverns, 2 huckster trucks, 1 soda fountain and lunch counter, 4 bowling alleys, 1 beauty parlor, 1 stoker plant, 1 briquette plant, 1 shoe-repair shop, 1 coal mine, and 1 electricity generating plant.

Analysis of the number of establishments operated by the store and petroleum associations reveals the extent to which these two types of associations overlap. Thus, the 766 store associations, besides their 863 stores, 232 warehouses, 155 fuel yards, 7 bakeries, and 19 creameries, were also operating 191 curb pumps at the stores, 154 separate service stations, and 91 bulk stations, and had a total of 111 tank trucks. The 736 petroleum associations had in operation, in addition to their facilities for dispensing gasoline and oils, 139 stores, 183 warehouses, and 38 fuel yards.

Membership

The distributive associations which reported as to membership included on their rolls nearly half a million persons at the end of 1936. The greatest single group of cooperators was in the gasoline and oil associations; these accounted for 50.6 percent of the whole number, and the store associations followed next in order with 40.5 percent of the total.

TABLE 2.—*Membership of Distributive Cooperatives, 1936, by Major Line of Business*

Major business	Number of associations reporting	Members	Average per association	Major business	Number of associations reporting	Members	Average per association
All associations	1,779	458,481	258	Buying clubs	94	6,573	70
				Petroleum associations	691	232,172	336
Store associations	850	185,774	219	Distributive departments of marketing associations	131	23,530	180
Groceries [1]	256	40,757	159				
General merchandise	199	40,538	204	Bakeries	5	5,307	1,061
Students' supplies	10	18,081	1,808	Creameries	3	4,497	1,124
Fuel	57	8,923	157	Water-supply associations	5	628	126
Farm supplies	313	72,249	231				
Miscellaneous [2]	15	5,226	348				

[1] Includes those handling meat also.
[2] This group includes mail-order, artists' supplies, clothing, and "other household supplies" associations.

What may be termed the typical American consumers' cooperative, from the point of view of membership, has from 100 to 250 members; 36.9 percent of all the distributive associations reporting fell in this group. Altogether, 88.7 percent of the total reporting had fewer than 500 members. There were, however, 62 cooperatives (3.5 percent) with 1,000 or more members each.

TABLE 3.—*Distribution of Distributive Cooperatives, by Number of Members at End of 1936*

Major business	Total reporting	Number of associations with classified membership								
		Under 50	50 and under 100	100 and under 250	250 and under 500	500 and under 750	750 and under 1,000	1,000 and under 2,000	2,000 and under 3,000	3,000 and over
All associations	1,779	245	348	657	328	93	46	50	7	5
Store associations	850	146	191	321	128	33	9	16	4	2
Buying clubs	94	59	23	8	3	------	------	1	------	------
Petroleum associations	691	28	100	258	176	58	37	30	2	2
Distributive departments of marketing associations	131	9	33	69	16	2	------	2	------	------
Bakeries	5	------	------	------	3	------	------	1	1	------
Creameries	3	------	1	------	1	------	------	------	------	1
Water-supply associations	5	3	------	1	1	------	------	------	------	------

The associations handling petroleum products are found almost wholly in the Mississippi Valley States, with only a few in the Middle Atlantic and Mountain States; there are only scattered associations of this type elsewhere throughout the country. In the Mississippi Valley States the farmers (who use large quantities of gasoline in their farm work) have taken the lead in the formation of these associations. The absence of development in the Eastern States may perhaps be due to lack of nearby, available sources of supply, and the large numbers of members in the low-paid occupations (and consequently without automobiles).

Buying clubs are playing an important part in the present development of the cooperative movement, especially in urban areas. Pre-

senting, as it does, a simple mechanism requiring almost no capital, the buying club is ideal in training persons how to work together. For small groups without sufficient funds, at the beginning, to operate a store or other enterprise requiring plant and equipment, it offers opportunities for savings without financial hazard. Most of the clubs reporting in the present survey were located in large cities. In numbers, New York, California, and Illinois led the way; most of the clubs in those States were in New York City, Los Angeles, and Chicago.

The stores are especially numerous in Minnesota, Wisconsin, and Illinois, as table 4, covering those reporting, indicates.

TABLE 4.—*Membership of Reporting Distributive Cooperatives, by Types and by States, 1936*

State	Total		Store associations		Petroleum associations		Other	
	Number reporting	Members	Number reporting	Members	Number reporting	Members	Number reporting	Members
United States	1,779	458,481	850	185,774	691	232,172	238	40,535
Alabama	3	1,235	3	1,235				
Arkansas	2	134	2	134				
California	45	6,518	30	4,123	1	80	14	2,315
Colorado	16	4,104	5	328	9	3,499	2	277
Connecticut	14	4,430	11	4,332			3	98
Delaware	1	100					1	100
District of Columbia	3	702			1	196	2	506
Florida	2	73	2	73				
Idaho	17	7,611	5	814	12	6,797		
Illinois	149	66,296	72	12,754	58	51,900	19	1,642
Indiana	75	33,838	42	18,215	29	13,330	4	293
Iowa	84	21,740	23	2,812	55	17,720	6	1,208
Kansas	151	21,451	57	8,291	47	6,376	47	6,784
Kentucky	3	388	3	388				
Maine	9	2,046	9	2,046				
Maryland	5	853	5	853				
Massachusetts	33	17,445	25	16,141			8	1,304
Michigan	87	15,950	71	13,886	3	657	13	1,407
Minnesota	224	64,837	104	23,037	105	35,917	15	5,873
Missouri	48	8,281	33	5,454	5	1,334	10	1,493
Montana	49	5,632	5	1,081	40	4,091	4	460
Nebraska	123	25,623	50	7,467	59	16,723	14	1,433
New Hampshire	4	1,494	4	1,494				
New Jersey	10	2,436	9	2,351			1	85
New Mexico	2	852			2	852		
New York	65	14,953	28	6,791	4	1,921	33	6,241
North Carolina	1	79	1	79				
North Dakota	63	10,141	7	530	51	8,729	5	882
Ohio	76	17,460	45	9,781	22	6,478	9	1,201
Oklahoma	13	3,044	7	2,119	5	823	1	102
Oregon	20	7,265	7	3,986	11	2,746	2	533
Pennsylvania	31	4,142	28	3,759	1	312	2	71
Rhode Island	1	131	1	131				
South Dakota	34	9,498	14	1,779	16	7,237	4	482
Tennessee	6	2,423	4	799			2	1,624
Texas	32	6,926	7	625	20	5,900	5	401
Utah	4	250	3	185	1	65		
Vermont	3	871	3	871				
Virginia	4	2,799	3	2,565	1	234		
Washington	55	11,088	27	5,703	24	4,897	4	488
West Virginia	8	1,502	8	1,502				
Wisconsin	200	51,115	86	17,100	106	32,783	8	1,232
Wyoming	4	735	1	160	3	575		

COMPOSITION OF MEMBERSHIP

Although the Bureau did not ask specifically for data on the occupational or other composition of the membership, such information was obtained in the spot studies made in five different localities and is at hand for a considerable number of other associations.

Among these, farmers' organizations outnumber by far the other occupational groups. Miners' associations rank next. The reporting associations include four coal miners' organizations in Illinois, one in Ohio, and three in Pennsylvania; three cooperatives of iron-ore miners in Minnesota (these also have many farmers in their membership); and two associations of copper miners in Michigan. Associations of textile workers reporting included two in Massachusetts, one in Connecticut, and one in North Carolina. The majority of the members in one association in Michigan are employees of a local power company; in another (Wisconsin), employees of a local cooperative dairy; in a third (Illinois), unskilled employees of the International Harvester Co.; and in a fourth (Wisconsin), the members are all district managers and carriers of a city newspaper. In an association situated in a suburb of Detroit the organization was started and is officered by school teachers. Associations of railroad workers include one in Minnesota, one in North Dakota, and two in Michigan. In two cooperatives in Illinois the membership consists largely of skilled laborers and unskilled laborers, respectively. Professional and white-collar people form the majority of the members in three other Illinois organizations.

One Illinois association which made an analysis of its membership from the point of view of occupation reported its make-up as follows: Teachers, students, and ministers, 164; other professions, 43; business people, 54; and unclassified, 29.

Amount of Business, 1936

The associations reporting to the Bureau had retail sales [8] in 1936 aggregating $146,153,418. In sales as well as in membership (as already seen) the petroleum associations were outstanding, doing well over one-third (34.7 percent) of the total business.

[8] Some of the retail associations have a small amount of wholesale sales—i. e., sales of members' produce, or wood products or handicraft articles, sales to other cooperatives or to local dealers (as of milk, bakery goods, etc.). This wholesale business is not included in these figures. There were 139 associations which reported some wholesale sales; these totaled $8,924,536 for the year 1936. It should be emphasized that these wholesale sales do not include marketing business of farmers' marketing associations, the distributive departments of which are included in this survey; the data here given for such distributive departments are for retail sales of consumer goods and farm supplies only.

The tables here given do not present a complete picture of local distribution of petroleum products on the cooperative plan. In some States—notably in Minnesota, Michigan, and Wisconsin—there are a number of associations, intermediate in character between the retail petroleum associations and the wholesale associations dealing in petroleum products. They are owned by the local store associations throughout a certain district (but less than State-wide in scope) and distribute the gasoline and oil throughout that district. In the present study these have been regarded as federated rather than local associations and have been included with the wholesales.[9]

TABLE 5.—*Sales of Reporting Distributive Cooperatives, 1936, by Major Line of Business*

Major business	Number of associations reporting	Amount of sales	Average per association
All associations	1,802	$146,153,418	$81,106
Store associations	858	71,027,638	82,783
Groceries [1]	259	11,612,935	44,838
General merchandise	194	15,701,165	80,934
Students' supplies	12	1,884,310	157,026
Fuel	56	5,515,885	98,498
Farm supplies	322	35,441,276	110,066
Miscellaneous [2]	15	872,067	58,138
Buying clubs	79	415,991	5,266
Petroleum associations	720	50,781,102	70,529
Distributive departments of marketing associations	132	20,360,534	154,246
Bakeries	6	595,680	99,280
Creameries	4	2,954,121	738,530
Water-supply associations	3	18,352	6,117

[1] Includes those handling meat also.
[2] This group includes mail-order, artists' supplies, clothing, and "other household supplies" associations.

The leading distributive associations, in point of sales in 1936 (omitting three students' associations which had sales of over a million dollars each) were: The Franklin Cooperative Creamery Association, Minneapolis, Minn., with sales of $2,827,560; the Cloquet Cooperative Society, Cloquet, Minn., with sales of $1,125,714; the Cooperative Trading Co., Waukegan, Ill., with sales of $709,736; and the New Cooperative Co., Dillonvale, Ohio, with sales of $639,476.

The greatest amount of cooperative business is still concentrated in the North Central States, more than 70 percent of the total in 1936 having been done there.

[9] The 9 associations in this class were owned by 109 local retail associations and did a combined business in 1936 of $958,815.

TABLE 6.—*Sales of Reporting Distributive Cooperatives, by Types and by States, 1936*

State	Total associations		Store associations		Petroleum associations		Other associations	
	Number reporting	Sales	Number	Sales	Number	Sales	Number	Sales
United States	1,802	$146,153,418	858	$71,027,638	720	$50,781,102	224	$24,344,678
Alabama	3	92,900	3	92,900				
Arkansas	2	1,652,481	2	1,652,481				
California	61	12,046,218	28	2,057,081	21	847,264	12	9,141,873
Colorado	17	1,156,030	5	101,288	10	994,533	2	60,209
Connecticut	12	1,150,535	10	1,001;267			2	149,268
Delaware	1	1,829					1	1,829
District of Columbia	2	7,000			1	1,500	1	5,500
Florida	1	6,921	1	6,921				
Idaho	17	1,151,257	5	416,087	12	735,170		
Illinois	157	15,562,150	71	5,007,718	67	9,763,569	19	790,863
Indiana	81	9,925,374	45	5,818,857	31	3,640,581	5	465,936
Iowa	90	6,889,262	24	1,442,435	59	4,604,366	7	842,461
Kansas	147	8,452,962	58	2,919,109	46	1,655,399	43	3,878,454
Kentucky	4	182,576	3	119,298	1	63,278		
Maine	11	728,670	11	728,670				
Maryland	5	297,979	5	297,979				
Massachusetts	31	4,714,590	26	4,571,139			5	143,451
Michigan	84	5,844,885	69	5,228,857	3	315,096	12	300,932
Minnesota	240	19,541,440	107	7,280,147	114	7,455,135	19	4,806,158
Missouri	50	2,987,434	34	2,345,592	6	276,504	10	365,338
Montana	47	1,956,338	4	535,960	39	1,265,549	4	154,829
Nebraska	132	9,002,015	53	4,141,215	62	3,682,787	17	1,178,013
New Hampshire	2	171,693	2	171,693				
New Jersey	9	1,591,662	9	1,591,662				
New Mexico	2	913,796			2	913,796		
New York	61	2,986,355	28	2,132,652	4	191,565	29	662,138
North Carolina	2	53,500	2	53,500				
North Dakota	61	3,226,936	7	281,377	51	2,595,462	3	350,097
Ohio	84	7,807,706	50	5,265,762	25	2,348,711	9	193,233
Oklahoma	13	1,119,542	7	892,204	5	190,338	1	37,000
Oregon	20	1,177,580	8	844,782	10	251,941	2	80,857
Pennsylvania	29	1,532,676	27	1,507,679	1	24,402	1	595
Rhode Island	1	43,654	1	43,654				
South Dakota	35	2,154,585	15	681,576	16	1,350,215	4	122,794
Tennessee	4	231,218	3	228,633			1	2,585
Texas	30	1,274,996	7	169,902	19	1,034,495	4	70,599
Utah	5	18,467	3	13,650	2	4,817		
Vermont	1	392,640	1	392,640				
Virginia	5	1,355,899	4	1,271,101	1	84,798		
Washington	31	1,710,370	26	1,591,571	2	90,589	3	28,210
West Virginia	8	229,073	8	229,073				
Wisconsin	200	14,529,934	86	7,859,526	106	6,118,952	8	511,456
Wyoming	4	280,290			4	280,290		

Net Earnings

A loss on the year's operations was sustained by 139 associations in the sum of $117,597 and 1,390 associations made a saving of $7,637,789. For the whole group, therefore, there were net earnings of $7,520,192.

Almost 48 percent—$3,581,516—of the total net earnings were made by the petroleum associations. They have shown remarkable

savings, as a group, since the cooperatives entered this field, although the margins have narrowed considerably in the past few years. The store associations accounted for net savings of $2,295,836.

TABLE 7.—*Net Gains and Losses of Reporting Distributive Cooperatives, 1936*

Major business	Total associations		Associations having—			
			Net gain		Net loss	
	Number reporting	Amount of net earnings	Number	Amount	Number	Amount
All associations	1,529	$7,520,192	1,390	$7,637,789	139	$117,597
Store associations	711	2,295,836	619	2,369,774	92	73,938
Groceries [1]	198	336,981	163	358,315	35	21,334
General merchandise	174	444,662	136	483,033	38	38,371
Students' supplies	8	103,935	7	103,989	1	54
Fuel	47	165,916	42	167,422	5	1,506
Farm supplies	270	1,214,193	259	1,221,745	11	7,552
Miscellaneous [2]	14	30,149	12	35,270	2	5,121
Buying clubs	55	9,311	53	9,575	2	264
Petroleum associations	633	3,581,516	605	3,603,569	28	22,053
Distributive departments of marketing associations	119	1,581,571	106	1,584,265	13	2,694
Bakeries	6	[3] 16,643	3	1,813	3	18,456
Creameries	2	63,526	1	63,718	1	192
Water-supply associations	3	5,075	3	5,075		

[1] Includes associations handling meats.
[2] Includes associations handling art supplies, clothing, mail-order goods, and "other household" goods.
[3] Loss.

Outstanding savings for their members were made in 1936 by the petroleum associations of Illinois, the "other distributive" associations in California, and both store and petroleum associations in Minnesota, as the following table indicates.

TABLE 8.—*Net Earnings of Reporting Distributive Cooperatives, by Types and by States, 1936*

State	Total associations		Store associations		Petroleum associations		Other associations	
	Number reporting	Net earnings	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount
United States	1,529	$7,520,192	711	$2,295,836	633	$3,581,516	185	$1,642,840
Alabama	1	1,247	1	1,247				
Arkansas	1	736	1	736				
California	34	1,252,577	26	122,854			8	1,129,723
Colorado	12	18,839	4	753	6	16,967	2	1,119
Connecticut	11	30,198	9	29,682			2	516
Delaware	1	507					1	507
District of Columbia	2	581			1	250	1	331
Florida	1	807	1	807				
Idaho	15	78,951	4	20,223	11	58,728		
Illinois	135	1,453,820	59	207,297	61	1,213,723	15	32,800

TABLE 8.—*Net Earnings of Reporting Distributive Cooperatives, by Types and by States, 1936*—Continued

State	Total associations		Store associations		Petroleum associations		Other associations	
	Number reporting	Net earnings	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount
Indiana	72	$545,092	38	$233,049	30	$269,128	4	$42,915
Iowa	76	206,949	20	22,164	[1] 50	173,523	6	11,262
Kansas	122	372,051	44	112,293	[1] 39	87,821	39	171,937
Kentucky	4	6,397	3	4,956	1	1,441	------	----------
Maine	7	374	7	374	------	----------	------	----------
Maryland	4	6,718	4	6,718	------	----------	------	----------
Massachusetts	22	189,087	19	187,742	------	----------	3	1,345
Michigan	79	183,106	64	160,493	3	6,493	12	16,120
Minnesota	211	953,786	92	302,936	101	506,740	18	144,110
Missouri	37	56,129	22	28,612	4	13,580	11	13,937
Montana	41	152,415	3	22,240	35	117,910	3	12,265
Nebraska	109	413,893	40	130,877	54	247,876	15	35,140
New Hampshire	3	13,162	3	13,162	------	----------	------	----------
New Jersey	9	36,915	9	36,915	------	----------	------	----------
New Mexico	2	61,110	------	----------	2	61,110	------	----------
New York	51	42,241	27	48,822	2	6,504	22	[2] 13,082
North Carolina	1	62	1	62	------	----------	------	----------
North Dakota	54	171,177	6	8,561	45	144,772	3	17,844
Ohio	66	249,762	40	173,460	22	70,996	4	5,306
Oklahoma	10	30,661	5	24,589	5	6,072	------	----------
Oregon	17	23,659	7	9,435	9	14,416	1	[2] 192
Pennsylvania	27	86,764	25	81,119	1	5,611	1	34
Rhode Island	1	689	1	689	------	----------	------	----------
South Dakota	28	141,956	10	9,814	16	129,002	2	3,140
Tennessee	3	[2] 5,838	3	[2] 5,838	------	----------	------	----------
Texas	21	51,584	3	2,614	[1] 14	48,200	4	770
Utah	3	140	1	200	2	[2] 60	------	----------
Vermont	2	6,138	2	6,138	------	----------	------	----------
Virginia	3	4,941	2	2,182	1	2,759	------	----------
Washington	39	89,859	19	44,810	18	41,695	2	3,354
West Virginia	8	7,459	8	7,459	------	----------	------	----------
Wisconsin	179	554,978	77	235,053	[1] 96	308,286	6	11,639
Wyoming	5	28,510	1	537	4	27,973	------	----------

[1] Not including 1 association having a loss, amount not reported.
[2] Loss.

Patronage Refunds

Slightly over 48 percent (938) of the whole number of distributive associations reporting in the survey returned patronage refunds for 1936. The 851 associations which reported the amount of refund returned $4,916,231; 75 others returned dividends ranging from 1½ to 17 percent but did not state the amount so returned, and 2 others reported varying rates on different commodities.

A larger proportion of the petroleum associations than of the store associations were able to make rebates—62.6 as compared with 38.4 percent. The petroleum associations accounted for 47.8 percent of the total amount returned.

None of the water-supply associations, bakeries, or creameries made any refunds on patronage. The price level of the first group, however, is set so low as to yield no surplus.

Table 10 shows, for the various types of associations the number of associations which returned dividends on purchases and the amount so returned on the 1936 business.

TABLE 9.—*Patronage Refunds of Reporting Distributive Cooperatives, 1936*

Major business	Number of associations returning	Amount of patronage refund	Average per association
All distributive associations	851	$4,916,231	$5,777
Store associations	317	1,237,375	3,903
Groceries	93	149,869	1,611
General merchandise	61	259,045	4,247
Students' supplies	5	99,558	19,912
Fuel	12	30,589	2,549
Farm supplies	139	684,755	4,926
Miscellaneous [1]	7	13,559	1,937
Buying clubs	38	5,921	156
Petroleum associations	441	2,349,841	5,328
Distributive departments of marketing associations	55	1,323,094	24,056

[1] Includes mail-order, artists' supplies, clothing, and "other household supplies" associations.

In addition to the associations reporting in the above table, 33 store associations, 41 petroleum associations, and 3 service and "other distributive" associations made refunds on purchases but did not report as to amount. Of 75 associations reporting definite rates the number returning dividends at each specified rate was as follows:

	Number		Number
1½ percent	1	5½ percent	1
1¾ percent	1	6 percent	15
2 percent	5	7 percent	3
2½ percent	2	8 percent	5
3 percent	10	9 percent	1
3½ percent	2	10 percent	10
4 percent	6	15 percent	1
4½ percent	1	17 percent	1
5 percent	10		

Cooperative associations are quite generally undercapitalized and in many places have voted to pay the patronage refunds either partly or wholly in shares credited to the individual member. Others are increasing the capital requirements per member. One association has raised the share requirements from one to five shares; the 4-percent patronage refund for 1936 was paid in merchandise orders to all owning the required five shares, and the others received 2 percent applied to the purchase of shares and 2 percent in merchandise orders.

Although the margins in the grocery business are small, some of these local associations have an enviable record of savings to their members. A number of those for which reports for 1936 were received had returned patronage refunds through all the years of the depression. One store association in Wisconsin returned $15,809 in dividends for the years 1933–36; its sales in 1936 were $116,570. One Nebraska association has returned refunds every year since its organization in 1916, amounting to $108,398. An outstanding Ohio organization established in 1908 has had sales totaling $7,645,224, on which patronage refunds aggregating $259,334 have been returned; and this in spite of the fact that it is located in the coal fields where unemployment and general economic disorganization have been rife.

THE BRITISH TRADE BOARDS SYSTEM[1]

THE British Trade Boards Acts of 1909 and 1918[2] furnish the legislative background for the system of trade boards now in operation in Great Britain. A trade board is defined as "a statutory body set up to fix minimum rates of wages so that the evil of unduly low wages may be remedied." This system provides for the establishment of minimum rates of wages in the so-called less organized trades.

At the end of 1936 there were 47 trade boards in operation in Great Britain. In the trades covered by these boards minimum rates of wages are fixed and are statutorily enforceable. Also, the rates thus established are revised from time to time by means of machinery set up under the acts.

The present article traces the origin of the British trade boards acts, follows their development during the years they have been in existence, and gives a short account of their present operation.

Origin and Development of System

The British trade boards legislation is directed, in the first place, against the "sweating evil." Prior to the introduction of the first Trade Boards Act in 1909, sweating prevailed in a number of industries and, in particular, in industries in which labor organization was found to be weak and ineffective. One effect of this lack of organization was the existence of an exceptionally low scale of wages.

A report on the sweating system was made by a select committee of the House of Lords as far back as 1890. This was followed by the submission of various private bills, among others, a "sweated industries bill" by Charles Dilke.

In 1906 the Board of Trade made an inquiry into the subject of earnings and hours. This investigation furnished much authoritative information on the subject of the sweated industries. It was in the same year that an Anti-Sweating League, having for its object the creation of interest in legislation for the prevention of sweating, was formed. In the two following years—1907 and 1908—select committees were created by the House of Commons to study the question of home work. The conclusions and the recommendations of the select House of Commons Committee of 1908 formed the foundation for the Trade Boards Act of 1909.

[1] By Harry E. Carlson, American Consul, London.

[2] Edw. VII., ch. 22, and 8, 9, Geo. V, ch. 32.

TRADE BOARDS ACT OF 1909

The principal conclusion reached by the select House of Commons Committee of 1908 was that much "sweated work" was being carried on, not only among home workers, but also among workers in the factories of the home-work trades. The committee went on record as having reached the conclusion that the only remedy for this situation was that of legislation.

The committee's principal recommendation foresaw the immediate establishment of "wages boards" in four trades—tailoring, shirt making, manufacture of underwear and infants' clothing, and lace finishing. At the same time the committee proposed that the Home Secretary be empowered to create similar wages boards in other trades after suitable inquiry had been made.

In the following year the first British Trade Boards Act was passed. Before the bill was drafted, careful study was made of the experiences which Australia and New Zealand had had, and, in particular, of the conciliation and arbitration system of New Zealand. The wages boards system of Victoria was also given consideration.

The Trade Boards Act of 1909 outlines the principles of the present British trade boards system. It followed along general lines the report made by the select House of Commons Committee of 1909. The act differed from the report in the respect that, whereas the report confined its recommendations to home workers alone, the act covered sweated workers in factories as well.

An examination of the Trade Boards Act of 1909 will show that it introduces three basic provisions. In the first place, provision is made for introducing minimum rates of wages. These are to be fixed, not on a national or district basis, but trade by trade. Second, the right to fix these rates is entrusted to a joint board composed of representatives of both employers and workers in the trade concerned, together with the addition of a few independent appointed members. In the third place, such minimum rates of wages as are fixed by a trade board are subject to confirmation by a Minister in the Government. When so confirmed, the rates are enforceable by either civil or criminal proceedings. Moreover, the enforcement of the fixed rates is assigned to a body of inspectors maintained at Government expense.

The four trades recommended by the House of Commons Committee were included in the schedule of the Trade Boards Act of 1909. Under the authority given in the act to increase the number of trades by provisional order, four additional trades were included under the provisions of the act within the next few years.

EFFECT OF WORLD WAR UPON TRADE BOARDS

The outbreak of the World War brought about the temporary suspension of the activities of some of the trade boards. The minimum wage rates worked out by these boards were superseded for the time being by the wage rates issued by the Ministry of Munitions.

As the war proceeded it was generally felt that the trade boards would be of importance in the facilitation of post-war adjustments in industry. This subject was touched upon in the recommendations made in 1917 by the Committee on the Relations between Employers and Employed (Whitley Committee).

WHITLEY COMMITTEE RECOMMENDATIONS

One of the principal recommendations which the Whitley Committee made was as follows:

> As a means of securing industrial harmony, joint standing industrial councils should be established for the well-organized trades, and trade boards for the less-organized trades, pending the development in these trades of such a degree of organization as would justify the establishment of a national or district industrial council.

The Whitley Committee also made certain suggestions. It advised that the trade boards should be empowered to establish legal minimum wage rates, and that their functions should be enlarged in such a manner as to enable them to furnish a regular machinery for negotiation and decision in the industries in question. The committee likewise suggested that the trade boards be authorized to deal with hours of labor and questions cognate to wages and hours. While the report of the Whitley Committee was no doubt taken into consideration in connection with the drafting of the second act (the Trade Boards Act of 1918), its principal recommendations were not incorporated in the act.

TRADE BOARDS ACT OF 1918

The Trade Boards Act of 1918 was passed on August 8, 1918. The earlier act was left practically unchanged by the new legislation. The amendments introduced in the act of 1918 had for their object the facilitation of the establishment of new trade boards and the making of improvements in the machinery suggested by experience.

Certain alterations in the existing trade boards legislation were, however, introduced by the act of 1918. In the first place the act changed somewhat the description of the classes of trades to which the trade boards acts could be applied. That part of the act which refers to this matter reads as follows:

> The Minister of Labor is empowered to establish trade boards in trades in which he is of the opinion no adequate machinery exists for the effective regulation of

wages through the trade and that, accordingly, having regard to the rates of wages prevailing in the trade or any part of the trade, it is expedient that a trade board should be formed.

The Whitley Committee recommendations for widened trade board functions were only partially incorporated in the act of 1918. A clause was included, however, authorizing the trade boards to make recommendations to any Government department with reference to the industrial conditions of the trade.

The new act became operative on October 1, 1918. In 1919 a national industrial conference was held. A national joint committee of this conference recommended that "trade boards should be established forthwith in the various less-organized trades where they do not already exist." This recommendation was accepted by the Government.

Within 2 years, 28 new trades were included under the provisions of the trade boards acts.

THE CAVE COMMITTEE REPORT

By 1921 a certain amount of criticism against the trade boards acts had made itself heard. This resulted indirectly in the appointment of a committee of inquiry into trade board activities, under the chairmanship of the Rt. Hon. Viscount Cave. The report of this committee was submitted in 1922.

The Cave Committee report recognized the need of the legal prevention of the sweating evil. It expressed the opinion that the trade board acts furnished suitable machinery for this purpose. The report admitted that the trade board system has had definitely beneficial results; at the same time, however, the conclusion was reached that the rate-fixing policies of certain trade boards had been ill-considered and that defects requiring remedy were existent.

As regards these defects, the committee asserted (1) that certain trade boards had failed to recognize their primary function of the protection of workers against sweating, (2) that certain trade boards were inclined to fix rates on a national rather than upon a local basis, and (3) that there was a lack of elasticity in the system, especially in the machinery for the adaptation of rates quickly to rapidly changing industrial conditions.

To remedy each of these three alleged major defects, the Cave Committee made definite recommendations. Among these recommendations was one suggesting the repeal of the existing trade boards acts, to be followed by the passage of a consolidation act.

A Government decision favored the adoption of the Cave Committee recommendations. The Government decided, at the same time, to put the committee's recommendations into force immediately by administrative processes, provided this could be done within existing statutory limitations.

A Parliamentary White Paper (Cmd. 1712) dated July 6, 1922, contains the announcement of this policy. The alterations under this policy were restricted to the introduction of certain changes for the acceleration of procedure. As far as the rate-fixing powers of trade boards were concerned, however, it was found to be impossible to put the committee's recommendations as a whole into force under existing laws.

A year later—1923—practically all the Cave Committee's recommendations were incorporated into a bill for the consolidation of the Trade Boards Acts of 1909 and 1918. The Government introduced this bill into the House of Commons, but no action was taken on the measure.

GOVERNMENT POLICY IN RESPECT TO TRADE BOARDS

In 1924 the British Government announced that it was not disposed to amend the trade boards acts. Government policy was stated in the House of Commons on December 16, 1924, to be substantially as follows:

(1) The grave evil of sweating must be abolished.
(2) The trade boards policy is necessary for this purpose.
(3) No new legislation is necessary.
(4) The suggested Cave Committee changes have been adopted without legislation.
(5) The trade boards acts will be extended to new trades only where it has been clearly ascertained by systematic investigation that sweating conditions prevail in any trade, and then only after a public inquiry has been held to examine the facts and to hear objections in any case of doubt.

Since 1923 no further attempts to introduce new trade boards legislation have been made.

PRESENT NUMBER OF TRADE BOARDS

At the end of 1920, 42 trade boards had been created. Three were formed in 1921, and two in 1933. The total still stands at 47. The number of district trade committees, however, decreased from 29 to 27; this total is still operative.

Operation of Trade Boards Acts

The Minister of Labor is responsible for the administration of the Trade Boards Acts of 1909 and 1918. An account of the administration of these acts from their introduction in 1909 until 1921 was submitted to the Cave Committee of which mention has already been made. This account is brought up to date in the annual reports of the Ministry of Labor which have since appeared.

The foregoing function of the British Ministry of Labor comprises the general surveillance of the application of the acts to the trades into

which the trade boards system has been introduced. This work on the part of the Ministry of Labor includes such matters as (1) the consideration of all inquiries as to the possibility of applying the trade boards acts to other trades; (2) the alterations of descriptions of trades to which the acts apply; (3) the interpretation of the descriptions of these trades; and (4) the periodical review of the constitutions and procedures of existing trade boards.

TRADES COVERED BY ACTS

The following list shows the 47 trade boards in operation in Great Britain on December 31, 1937:

Aerated waters (England and Wales).
Aerated waters (Scotland).
Boot and shoe polish.
Boot and shoe repairing.
Brush and broom.
Button manufacturing.
Chain.
Coffin furniture and cerement making.
Corset.
Cotton waste reclamation.
Cutlery.
Dressmaking and women's light clothing (England and Wales).
Dressmaking and women's light clothing (Scotland).
Drift nets mending.
Flax and hemp.
Fur.
Fustian cutting.
General waste materials reclamation.
Hair, bass, and fiber.
Hat, cap, and millinery (England and Wales).
Hat, cap, and millinery (Scotland).
Hollow ware.
Jute.
Keg and drum.
Lace finishing.
Laundry.
Linen and cotton handkerchief and household goods and linen piece goods.
Made-up textiles.
Milk distributive (England and Wales).
Milk distributive (Scotland).
Ostrich and fancy feather and artificial flower.
Paper bag.
Paper box.
Perambulator and invalid carriage.
Pin, hook and eye, and snap fastener.
Ready-made and wholesale bespoke tailoring.
Retail bespoke tailoring (England and Wales).
Retail bespoke tailoring (Scotland).
Rope, twine, and net.
Sack and bag.

Shirtmaking.
Stamped or pressed metal wares.
Sugar, confectionery, and food preserving.
Tin box.
Tobacco.
Toy manufacturing.
Wholesale mantle and costume.

The number of establishments in the industries and occupations under the jurisdiction of the trade boards in each of the 6 years, 1931 to 1936, was as follows:

	Establishments
1931	92, 946
1932	92, 173
1933	91, 946
1934	92, 858
1935	91, 297
1936	89, 148

POWERS OF MINISTER OF LABOR

The powers of the Minister of Labor in respect to trade boards are set forth in the acts of 1909 and 1918. He is authorized to apply the provisions of these acts by special order to any trade to which they have not at the time been applied. This action can be undertaken by the Minister of Labor only if he is of the opinion that there is no adequate organization for the effective regulation of wages throughout the trade in question and that the trade, in view of the wages prevailing, requires the protection of a trade board. The Minister of Labor can, however, apply the acts only to trades. They cannot be applied to professions or to private domestic service.

When representations are made showing that conditions in a trade are such as to make the application of the acts of 1909 and 1918 desirable, a careful investigation of these conditions is made before any steps are taken. This investigation is carried out by the statistical staff of the Ministry of Labor. The purpose of the investigation is to collect information regarding the organization of the trade and its prevailing wage levels. The facts thus assembled are thereupon presented to the Minister of Labor.

When the Minister of Labor decides in favor of establishing a trade board in any trade, a special order is drawn up incorporating a description of the trade. Public notice is thereupon given of the intention to apply the trade boards acts to the trade. Provision is made for the holding of public inquiries in cases where objections to the proposed order are made. The special orders establishing trade boards are not issued unless there are no objections to the proposed order, or until any objections which may have been received have been met.

When the Trade Boards Acts of 1909 and 1918 have been applied to a trade, the Minister of Labor is obliged to form one or more trade boards in that trade. The trade boards, in turn, may, if they so desire, proceed to establish district trade committees which fulfill certain advisory functions.

At one period, 7 of the boards had availed themselves of the power to set up these committees, but by the end of 1937 the number had been reduced to 3, namely, the Retail Bespoke Tailoring Trade Board (England and Wales) with 14 committees, the Boot and Shoe Repairing Trade Board with 12 committees, and the Made-up Textiles Trade Board with 1 committee.

Alterations and interpretation of trade descriptions.—As occasion arises the Ministry of Labor also takes up the question of the alteration of the descriptions of the trades to which the trade boards acts apply. The Ministry's activities in this field do not appear to be particularly heavy and, to judge from the annual reports of the British Ministry of Labor, comparatively few alterations have been made, since the introduction of the acts, in the descriptions of the trades to which they apply.

A considerable volume of work is involved in connection with the interpretation of the descriptions of the trades included under the provisions of the trade boards acts. This work takes the form of the expression of opinions concerning the nature of the operations of the trade boards trades. Questions of this kind arise either as a result of inquiries addressed direct to the Ministry by employers or workers, or in consequence of visits paid to trade boards establishments by officers of the trade boards inspectorate.

The number of opinions of this kind which have been rendered by the British Ministry of Labor each year since 1926 are indicated in the following statement:

	Opinions		*Opinions*
1926	932	1932	1,004
1927	862	1933	1,026
1928	939	1934	1,059
1929	1,054	1935	1,012
1930	1,082	1936	1,002
1931	1,205	1937	963

Constitution of trade boards.—When a special order has been made applying the trade boards acts to a particular trade, it becomes the duty of the Minister of Labor to set up a trade board in that trade. For this purpose, statutory regulations are made prescribing the size of the board and dealing with various matters governing its constitution and proceedings.

Different trade boards may be established for different branches of a trade; for example, the women's clothing trade is covered by two trade boards, one (the Wholesale Mantle and Costume Board) being con-

cerned with the wholesale manufacture of tailored costumes, and the other (the Dressmaking and Women's Light Clothing Board) covering, in addition to the making of dresses, the making of blouses, underclothing, etc.

Separate boards may also be established for separate parts of the country. In practice, the jurisdiction of 37 of the 47 trade boards covers the whole of Great Britain but in the case of 5 trades—aerated waters; milk distributive; retail custom tailoring; dressmaking and women's light clothing; and hat, cap, and millinery—separate boards have been set up for England and Wales and for Scotland.

COMPOSITION OF TRADE BOARDS

A trade board consists of an equal number of representatives of employers and workers in the trade, with the addition of a small number of independent persons known as "appointed members." The number of representative members depends chiefly upon the extent and variety of the interests requiring representation and varies from 6 on each side (Drift-Nets Mending Board) to 24 on each side (Milk Distributive Board for England and Wales). In practice the number of appointed members appointed on each board is three; and with one exception these are composed of two men and one woman. The one exception is the board for the boot and shoe repairing trade; in this trade the number of woman workers is negligible, and consequently the three appointed members are men. The chairman and the deputy chairman of a board are appointed members who are appointed directly to those positions by the Minister of Labor.

The responsibility for finally selecting and appointing the persons who are to constitute a trade board rests with the Minister of Labor. In preparing a list of candidates for appointment as members of a board, it is the practice to invite organizations of employers and of workers connected with the trade to furnish for the Minister's consideration the names of persons whom they regard as suitable to represent the different interests which will be affected by the board's orders. It is necessary in this connection to ensure that the list of candidates includes one or more persons qualified to speak for the principal branches of the trade, for the chief occupations of the workers, and for the principal districts where the trade is carried on. In the case of a trade where a considerable proportion of home workers are engaged, the list must include a home worker. If more than one organization of employers or workers is concerned, seats on the board are allotted, as far as possible, in proportion to their respective interests. The final decision upon the nominations received rests with the Minister. If the organizations cannot nominate suitable candidates for some of the seats, inquiry is made by the Department's officers for

persons with the necessary qualifications in the districts from which candidates are desired.

The total number of seats allotted to representative members on all boards and committees, at the end of 1937 was 843 employers' seats and 843 workers' seats. Of the employers' seats 732 were filled by nominees of employers' associations, and of the workers' seats 606 were filled by nominees of trade-unions.

It is essential that the appointed members [3] should be persons who will be accepted as impartial by both sides, and with this object it is usual to exclude from consideration for these posts persons who take or have recently taken an active part in the work of any political party (e. g. members of or candidates for Parliament), persons who have been actively associated with the work of employers' or workers' organizations, and any other persons whose activities would give rise to doubt as to their impartiality. In December 1937 the appointed members numbered 56, of whom 17 were women.

When suitable candidates have been obtained for all the seats on a new trade board, the new board is formally constituted by minute.

Review of constitution of trade boards.—The normal period of office of a trade board is 2 years. Toward the end of this period, steps are taken to review the constitution of a board in order to see in what respects, if any, its constitution needs improvement or alteration. This review affords an opportunity of correcting such defects in the constitution of the board as experience may have brought to light—for example, the over-representation or under-representation of a particular branch of the trade or of a particular district where the trade is carried on, the adjustment of representation as between different branches of the trade necessitated by development or retrogression, the strengthening of the personnel by bringing in new members, and the dropping of members who may have failed to attend meetings. Vacancies due to the death or resignation of members are usually filled as soon as possible after their occurrence.

POWERS OF TRADE BOARDS

Fixing of minimum rates of wages.—The principal object for which trade boards are established is the fixing of minimum rates of wages in a given trade.

Before minimum rates of wages are established in a trade, the trade boards must give notice to the interested parties of the proposed new rates. A period of 2 months is allowed for lodging objections to the proposals and trade boards must give consideration to any objections so lodged.

[3] The chief function of the appointed members is to act as conciliators in bringing about agreement between the worker and the employer representatives during negotiations. Their objective is a unanimous decision on the orders to be adopted and that is in most cases secured. Only a majority vote is essential, however, and in case of a deadlock in the negotiations or a tie vote between the representative members, the appointed members may cast the deciding vote.—Ed.

Whenever a schedule of minimum wages is fixed by any trade board, this schedule must be submitted to the Minister of Labor. Under the terms of the trade boards acts, the Minister of Labor is required either to issue a rate confirmation order or to request reconsideration of the new schedule.

When fixed and confirmed a schedule of rates is legally binding on all employers to whom it applies. Any employer who pays less than these rates becomes liable to the payment of a fine: he may likewise be ordered to pay arrears of wages to the underpaid workers.

The acts of 1909 and 1918 empower the trade boards to fix various kinds of rates of wages. These are as follows: (1) A minimum rate or rates of wages for time work (known as general minimum time rates); (2) a minimum basic time rate for piece workers (known as piece-work basic time rate); (3) overtime rates; and (4) occupational and other kinds of rates. An employer who himself fixes the piece rates must fix them at such a figure as will enable an ordinary piece worker to earn as much as the piece-work basic time rate. In the absence of a general or special minimum piece rate, piece workers must be paid at a piece rate that is sufficient to yield to an ordinary worker, in the circumstances of the case, earnings at least equal to the appropriate general minimum time rate. Provision is made in respect to the several kinds of rates mentioned above for the fixing of different rates for (1) different groups of workers and (2) different districts.

Among other things, the trade boards are empowered to grant permits of exemption—subject to such conditions as may be found necessary—to time-workers who, because of infirmity or physical injury, are not able to earn the minimum time rate.

Other powers.—A further power of the trade boards is that of the establishment of district trade committees. The latter have advisory functions. These committees consist of representatives of local employers and workers, of representative members of the trade boards concerned, and of one or more appointed members.

The district trade committees may recommend to the trade boards suitable wage rates for their respective areas; or they may comment to the trade boards on the rates which the boards have proposed.

The trade boards may appoint administrative committees, and nearly all of them have done so. To these committees are delegated matters pertaining to inspection and enforcement of the minimum rates, interpretation of the schedule of rates, and questions arising out of the definition of the trades for which the boards function. The trade boards are empowered to set up permits committees and to delegate to such committees the boards' powers to issue permits of exemption. All boards have done this.

Special committees for the study of special subjects have also been appointed from time to time. Committees of this kind have given

consideration to such matters as revision of the scope of the trade boards, training of workers, apprentice rates and conditions, and special rates for home workers.

Wage rates submitted and confirmed.—Meetings of the trade boards are held mainly for the purpose of fixing or of revising minimum wage rates.

When new rates or revisions of rates have been decided upon after consideration of any objections submitted since the rates were first proposed, the submission thereof to the Minister of Labor for confirmation takes place. Trade board activities under this heading for the period 1926 to 1937 are shown in table 1.

TABLE 1.—*Number of Wage Rates Submitted by Trade Boards and Confirmed by Ministry of Labor, 1926 to 1937*

Year	Number of trade boards submitting rates	Number of sets of rates—	
		Submitted	Confirmed by Ministry of Labor
1926	12	15	15
1927	14	18	18
1928	9	10	10
1929	12	14	12
1930	18	23	22
1931	16	17	16
1932	8	9	9
1933	17	19	19
1934	9	13	13
1935	9	11	11
1936	7	10	10
1937	27	30	25

The exact nature of these confirmed wage rates is shown in the annual reports of the British Ministry of Labor. Each set of confirmed rates is published in poster form so that it may be hung up in factories and workshops, and in leaflet form for office use. The posters are issued free and their exhibition in the employers' premises is compulsory. A small charge is made for the leaflet form.

There is much variation in the use made of the wage rates powers entrusted to the trade boards, as the various boards follow lines suited to the requirements of their particular trades.

General minimum time rates have been fixed by all boards, and most of them have fixed basic time rates for piece work. About one-third have introduced general minimum piece rates and all have fixed rates for overtime work.

WORK OF TRADE BOARDS INSPECTORATE

The British trade boards acts are enforced by a special board of inspectors. In 1923, a reorganization of the trade boards acts inspectorate took place under which, for the purposes of the inspection of

trade board activities, Great Britain was divided into six areas, the headquarters of which were located as follows:

1. Edinburgh (Scottish division).
2. Manchester (Northwestern division).
3. Leeds (Northeastern division).
4. Birmingham (Midland division).
5. Bristol (Southwestern division).
6. London (Southeastern division).

Originally there were substations in Cardiff and Plymouth, attached to the Southwestern division. Late in 1924, however, an additional division with headquarters at Cardiff was established for Wales.

At the end of 1923, there were 40 trade boards acts inspection officers, including a chief inspector, a deputy chief inspector, and an officer in charge of special inquiries. Of this total, 29 were permanent inspectors, while 11 were temporarily loaned from other departments of the Ministry of Labor.

In 1924, a permanent staff of 60 inspectors was authorized; of these, 54 had been appointed by the end of the year. In the period 1926 to 1933, the officers employed on the trade boards acts inspectorate varied between 58 and 72.

The method followed in inspection is the investigation of all complaints received, combined with the routine inspection of all trade boards establishments in particular areas. These are selected in such a way as to ensure a periodic review of all establishments in all districts.

Details showing the results of these inspections may be found in appendices to the annual reports issued by the Ministry of Labor.

In the statement below figures are given showing the total number of complaints of infringement of the trade boards acts received by the trade boards act inspectorate from 1926 to 1936:

	Number of complaints	*Complaints not requiring action*
1926	2, 922	524
1927	2, 526	570
1928	2, 331	369
1929	2, 046	254
1930	2, 246	190
1931	2, 145	172
1932	2, 177	176
1933	2, 385	262
1934	2, 552	298
1935	2, 174	287
1936	2, 028	288

These infringement complaints, many of which are dealt with by correspondence, are received from various sources, such as trade-unions, individual workers, employers' associations, and individual employers.

An idea as to the volume of work performed by the trade boards inspectorate can be gained from table 2.

TABLE 2.—*Activities of British Trade Boards Inspectorate, 1926 to 1936*

Year	Number of wages inspections	Number of visits by inspectors	Number of workers employed in establishments inspected
1926	10,874	11,465	111,305
1927	12,130	12,752	103,826
1928	14,438	14,047	100,814
1929	15,289	14,187	121,070
1930	23,469	16,439	225,803
1931	23,592	23,340	219,573
1932	20,414	20,574	227,582
1933	16,849	17,060	186,752
1934	17,858	18,053	178,962
1935	19,892	20,189	210,911
1936	17,971	18,151	211,251

The trade boards acts provide penalties for employers who fail to pay the fixed minimum rates of wages or who commit other offenses, such as failure to post notices or to keep records. In addition, workers who have been underpaid, or in certain cases trade boards inspectors acting in their behalf, may introduce civil actions for the recovery of arrears of wages. In the great majority of cases, the Ministry of Labor has been able to secure the payment of arrears of wages without having recourse to legal proceedings. Civil action was necessary in a few instances, as table 3 indicates.

TABLE 3.—*Amount of Wages Recovered Under British Trade Boards Acts, Establishments Involved, and Cases Prosecuted, 1926 to 1936*

Year	Number of establishments involved in claims	Number of claims prosecuted	Total number of employees involved	Amount of wages recovered
1926	2,645	67	7,077	£47,614
1927	2,543	50	6,591	35,534
1928	2,479	42	5,937	31,063
1929	2,336	98	5,214	24,859
1930	2,857	79	6,812	30,384
1931	2,784	33	7,011	30,557
1932	2,493	35	6,354	25,120
1933	2,117	24	5,515	24,157
1934	2,168	40	5,751	27,166
1935	2,295	28	6,144	25,437
1936	2,117	19	5,711	24,167

Legal proceedings, for the most part, took the form of criminal prosecutions, a number of which were instituted for breaches of the law other than that of payment of wages at less than the minimum rates fixed by the trade boards.

In addition to the foregoing activities, the trade boards inspectorate undertakes each year a certain number of special inquiries. These

cover various technical questions connected with the operation of the trade boards acts, and are carried out by the inspectors either for the Ministry of Labor or for individual trade boards.

Influence of Trade Boards Acts on Labor Conditions

British Governments have given their support to the trade boards legislation of 1909 and 1918 because they have felt, among other things, that the existence of these boards has assisted materially in the settlement of industrial differences. Experience has shown that the British trade boards have had a beneficial influence on the relations between employers and workers in the trades to which they have been applied.

It has been found, in the first place, that the trade boards have reduced the likelihood of wage disputes, of labor outbursts, and of strikes in the trades in which the boards have been introduced.

Furthermore, although in the trades covered by trade boards the percentage of organized workers as against the total number of workers in the trade may be comparatively small, the leaders of the organized workers have a place on the trade boards and are in touch with the employers in the trade.

One of the main advantages of the trade boards system is unquestionably the opportunity which those agencies afford for full discussions between the workers and their employers of matters likely to lead to industrial actions. This contact between employers and workers has, it is said, been found to constitute an important factor for the amicable settlement of disputes in the trade boards trades.

Productivity of Labor and Industry

EFFECTS OF MECHANIZATION IN CIGAR MANUFACTURE [1]

By W. D. Evans, *Bureau of Labor Statistics*

THE cigar-manufacturing industry presents an unusual case in the study of replacement of hand by machine methods. Throughout the nineteenth century and at the beginning of the twentieth, the manufacture of cigars was carried on almost exclusively by skilled hand workers using simple tools only. However, in 1917 machines were introduced which, starting with leaf tobacco as raw material and requiring no special skill of workers in attendance, produced the finished cigars by a series of continuous and integrated operations. The introduction of cigar machines was not followed by their general installation throughout the industry. Today, more than 20 years after the machines first became available, a few factories and a number of small shops continue to use the older hand methods—methods little different from those which might have been observed 30 and even 50 years ago. As a result, cigars—a relatively standardized product—are made by an industry divided into two sections, one using skilled hand labor and time-honored processes, the other, unskilled workers and ingenious machines.

The hand process survives in somewhat less than one-quarter of the cigar production despite the saving of labor time made possible by use of cigar machines. A factory using long-filler cigar machines requires less than half as much labor to produce a standard quantity of cigars as a plant using hand methods.[2] Mechanization of the manufacture of short-filler cigars results in even greater labor-time savings.

A few other improvements in techniques of cigar manufacture have taken place since 1900, but have proved of minor significance; the effects of mechanization in the cigar industry may be credited almost entirely to the increasing use of cigar-making machines. Thus, many of the results of mechanization which in other industries are all too frequently obscured in a multiplicity of small changes stand out here in sharp relief.

[1] Summary of a study of the cigar industry made under the direction of Boris Stern of the Bureau of Labor Statistics. The complete survey will be published in a separate bulletin entitled "Mechanization and Labor Productivity in the Cigar Manufacturing Industry." This is one of a series undertaken by the Bureau of Labor Statistics in cooperation with the National Research Project of the Works Progress Administration.

[2] On basis of data gathered during field survey. Estimate refers to cigars manufactured to retail at 5 cents each.

Effects of Mechanization on Production

In order to appraise the effects of mechanization on the cigar-manufacturing industry, it is necessary first to examine the competitive background against which the industry has operated.

At the beginning of the present century, cigars constituted the most important form in which tobacco was consumed. In fact, the value of the annual production of cigars at that time was over 50 percent greater than that of all other tobacco products combined.[3] During the period 1900–1920, the annual production of cigars increased, reaching a peak of 8.1 billion cigars in 1920. That year saw the highest production level ever attained by the cigar industry, and marked the beginning of its decline. Between 1920 and 1929 production fell to 6.5 billions. During the depression years following, production declined sharply to a low of 4.3 billions in 1933. Subsequent recovery raised the level only to 5.2 billions in 1936, as indicated below.

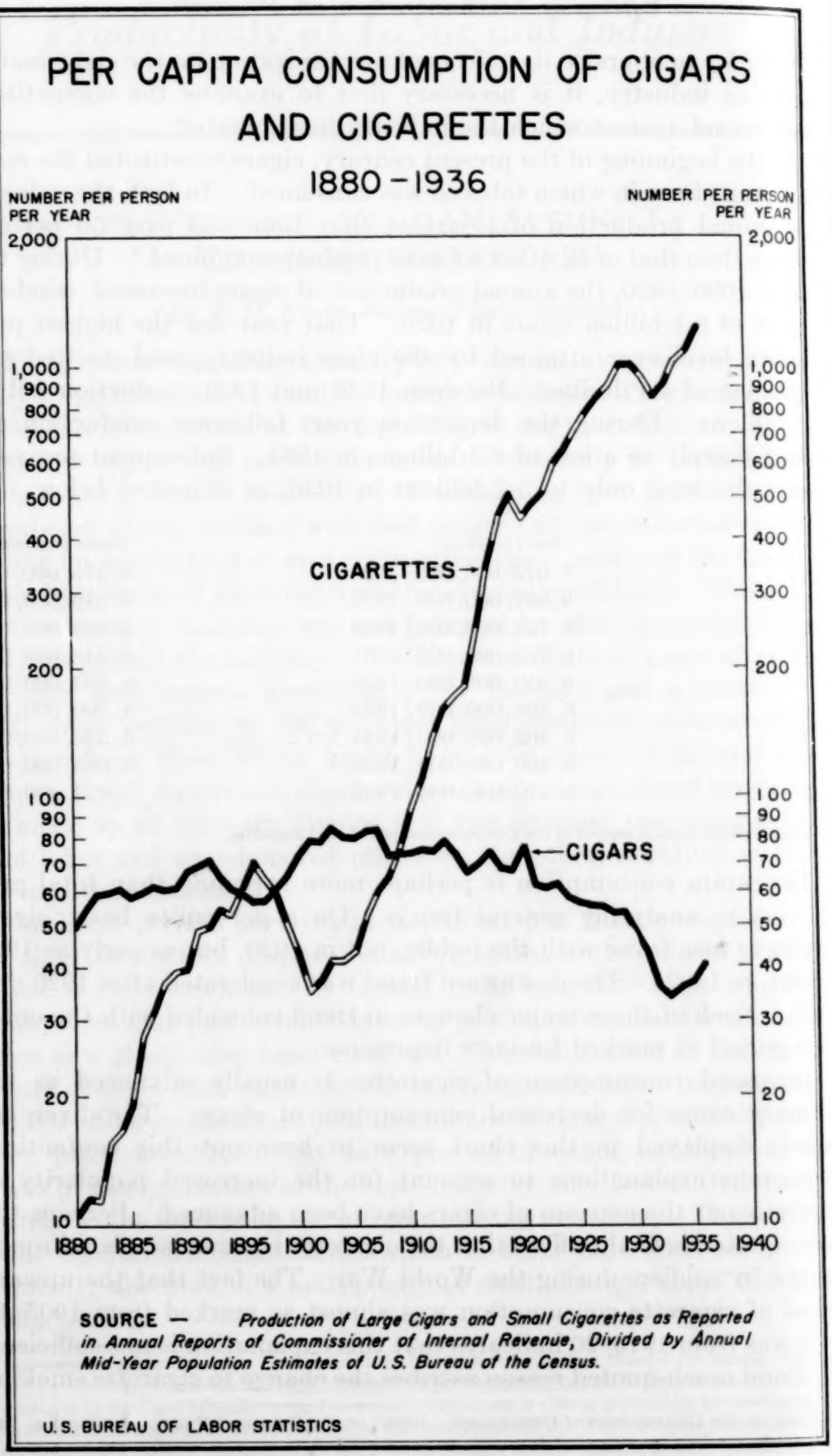
	Cigars produced [1]		*Cigars produced* [1]
1919	7, 072, 000, 000	1928	6, 373, 000, 000
1920	8, 097, 000, 000	1929	6, 519, 000, 000
1921	6, 726, 000, 000	1930	5, 894, 000, 000
1922	6, 722, 000, 000	1931	5, 348, 000, 000
1923	6, 950, 000, 000	1932	4, 383, 000, 000
1924	6, 598, 000, 000	1933	4, 300, 000, 000
1925	6, 463, 000, 000	1934	4, 526, 000, 000
1926	6, 499, 000, 000	1935	4, 685, 000, 000
1927	6, 519, 000, 000	1936	5, 172, 000, 000

[1] Data are from annual reports of the Commissioner of Internal Revenue.

Per-capita consumption is perhaps more revealing than total production in analyzing general trends. On a per-capita basis, cigars began to lose favor with the public, not in 1920, but as early as 1907 (chart, p. 1102). The downward trend was accelerated after 1920 and 1929. Each of these major changes in trend coincided with the onset of a period of marked business depression.

Increased consumption of cigarettes is usually advanced as the primary cause for decreased consumption of cigars. The divergent trends displayed in this chart seem to bear out this contention. Numerous explanations to account for the increased popularity of cigarettes at the expense of cigars have been advanced. Perhaps the most quoted is to the effect that the cigarette became popular through its use by soldiers during the World War. The fact that the upward trend of cigarette consumption was almost as marked from 1905–13 as it was from 1915–20 indicates that this explanation is not sufficient. A second much-quoted reason ascribes the change to cigarette smoking

[3] United States Commissioner of Corporations. Report on the Tobacco Industry. Washington, 1909, pt. I, p. 149.


PER CAPITA CONSUMPTION OF CIGARS AND CIGARETTES
1880 - 1936
NUMBER PER PERSON PER YEAR
NUMBER PER PERSON PER YEAR
2,000
1,000
900
800
700
600
500
400
300
200
100
90
80
70
60
50
40
30
20
10
CIGARETTES
CIGARS
1880 1885 1890 1895 1900 1905 1910 1915 1920 1925 1930 1935 1940
SOURCE — Production of Large Cigars and Small Cigarettes as Reported in Annual Reports of Commissioner of Internal Revenue, Divided by Annual Mid-Year Population Estimates of U. S. Bureau of the Census.
U. S. BUREAU OF LABOR STATISTICS

by women; a third to the need of this modern age for a quick, short smoke. All these are undoubtedly significant factors, but others need consideration.

Cigarettes and cigars cater to the same human want—the pleasure obtained from smoking tobacco. It is a common observation that cigarettes are a less expensive form of tobacco consumption than cigars. It seems logical, therefore, to assume that the relative costs of the two products to the consumer have been a factor in the success of cigarettes. This conclusion is strengthened by the observation that the major changes in per-capita consumption of cigars have taken place during periods of general economic depression, when this influence should be at its strongest.

The process has not been simply one of substitution of a lower-priced for a higher-priced article, however, as per-capita cigarette consumption also declined during depression periods. In addition to any substitution which has taken place, there has been a real increase in the demand for cigarettes. While the amount of tobacco used annually in the manufacture of cigars decreased 34,800,000 pounds between 1926 and 1934, that used in the manufacture of cigarettes increased 85,500,000 pounds—a net increase of over 50,000,000 pounds per year.[4] Even with allowance for population growth, the per-capita consumption of tobacco in cigars and cigarettes increased.

The consumption trends of the two products, indicated on page 1102, somewhat exaggerate the true situation since the units used to represent the two products are not strictly comparable. One cigar is equivalent to a number of cigarettes.

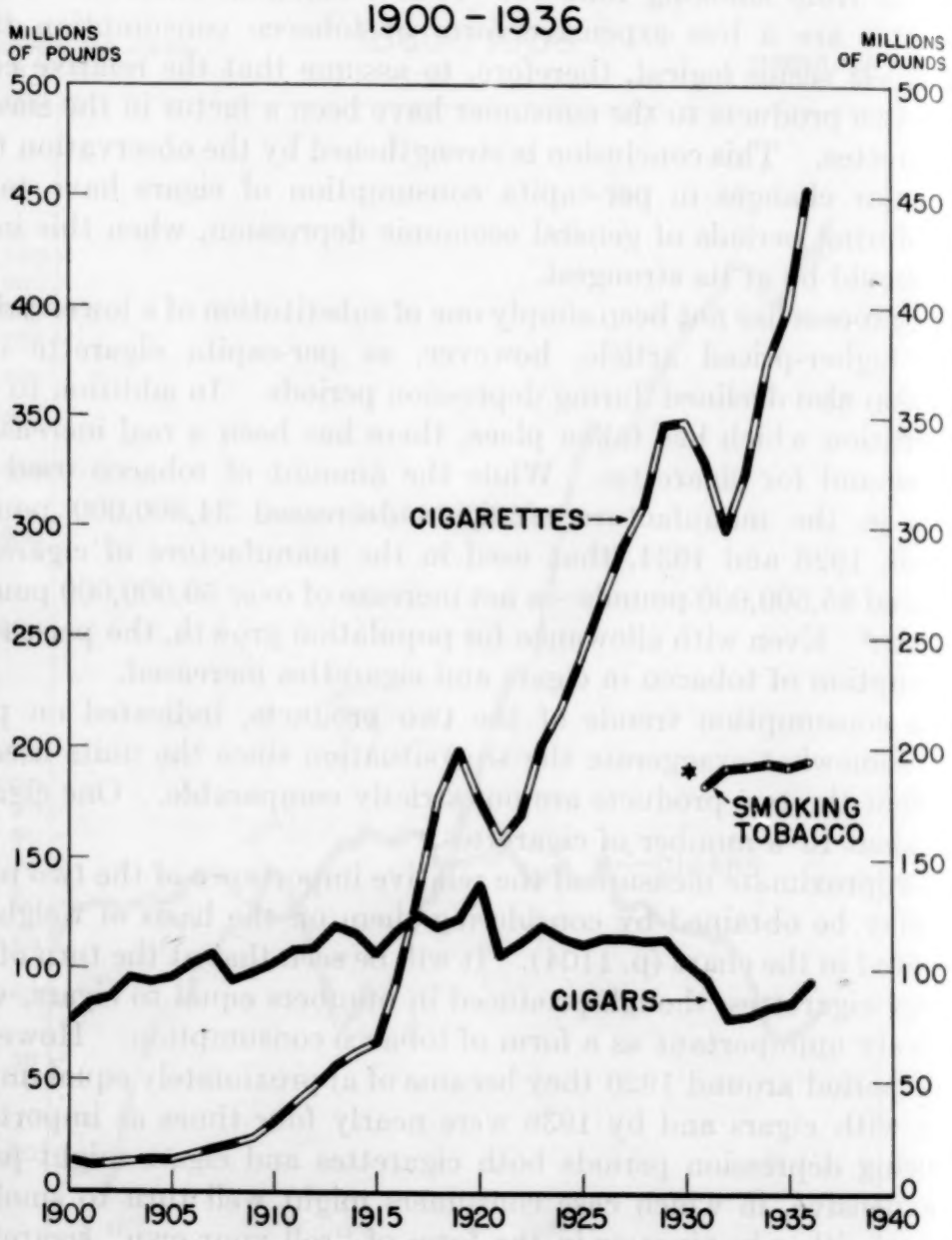
An approximate measure of the relative importance of the two products may be obtained by considering them on the basis of weight as presented in the chart (p. 1104). It will be seen that at the turn of the century cigarettes, though produced in numbers equal to cigars, were relatively unimportant as a form of tobacco consumption. However, in the period around 1920 they became of approximately equal importance with cigars and by 1936 were nearly four times as important.

During depression periods both cigarettes and cigars might prove too expensive, in which case consumers might well turn to smoking tobacco, either in pipes or in the form of "roll your own" cigarettes. Unfortunately, it is not possible to follow the changes in demand for smoking tobacco prior to 1931, since before that date smoking tobacco was combined in the annual reports of the Commissioner of Internal Revenue with scrap chewing tobacco—a product of decidedly dissimilar character. However, it will be noted that during the depression years following 1931 the production of smoking tobacco increased, in contrast to that of cigarettes and cigars which showed decreases (chart, p. 1104).

[4] Annual reports of the Commissioner of Internal Revenue.

ESTIMATED CONSUMPTION OF TOBACCO IN VARIOUS FORMS

1900 - 1936



SOURCE — *Annual Reports of U.S. Commissioner of Internal Revenue:*
CIGARS—Leaf Tobacco Used in Manufacture of Large Cigars Converted to Stemmed Basis, Using Method Adopted by U.S. Bureau of Internal Revenue (3 Pounds Stemmed Leaf Equivalent to 4 Pounds Unstemmed Leaf)
CIGARETTES—Leaf Tobacco Used in Manufacture of Small Cigarettes Converted on Basis 15 Percent (Representing Turkish) Not Stemmed, Balance Stemmed.
SMOKING TOBACCO—Finished Weights, as Reported to U.S. Bureau of Internal Revenue

* *NOT AVAILABLE BEFORE 1931*

U. S. BUREAU OF LABOR STATISTICS

Differences in advertising methods have probably had some influence on the relative cigar and cigarette markets. Cigar manufacture has been carried on by a large number of concerns with a multiplicity of brands, shapes, and sizes of cigars. Cigarette manufacture, on the other hand, early attained volume production of a few standardized brands. Consequently, cigar advertising has been "spread thin" while cigarette advertising has emphasized and reemphasized the merits of a few major brands. Moreover, the type of advertising used has differed between the two products. Cigar advertising, in general, has been of the type to induce only the selection of one brand of cigar over another. Cigarette advertising, through design or accident, has served in addition to stimulate a desire to use the product itself, thus widening the market for cigarettes.

As might be expected, the decline in the market for cigars following 1920 engendered severe competition in the industry. The efforts of manufacturers to maintain sales volume in a shrinking market made price cutting inevitable.

In the cigar industry this has taken two forms. Cigars are sold for the most part in standard retail price classes under established brand names, and improvement in the quality of tobacco used in any cigar therefore may be the equivalent of a price cut without any price change having taken place. Conversely, there may be a cut in the retail price without a corresponding reduction in quality. Since cigars have this quality flexibility, it is frequently difficult to follow real changes in cigar prices.

From 1921 to 1929 economic conditions were in general quite favorable. No increasing economic pressure on the average cigar smoker, making it necessary for him to revise his smoking habits and turn to lower-priced cigars, was apparent during this period. Nevertheless, between 1921 and 1929 the proportion of all cigars which sold for 5 cents or less each increased from 30 to 55 percent (table 1). It seems reasonable to assume that during this period there was an actual improvement in the quality of cigars offered for sale at any given price level, which in turn permitted consumers to buy cigars of the same quality at constantly decreasing average prices.

The second form of price cutting was much in evidence after 1929 when a number of large concerns selling cigars under nationally advertised brand names directly cut their established retail prices, at the same time guaranteeing to consumers that the quality of tobacco used was not cheapened. In many instances, the cut in the advertised price of these brands was from 10 to 5 cents apiece. During this same period, the depression presumably operated on the average purchaser's budget so that there was a definite factor of consumer change to lower-quality products. Whatever the cause, by 1936 the proportion of all

cigars which sold for 5 cents apiece or less rose to more than 88 percent of the national production.

TABLE 1.—*Percentage Distribution of Production of Cigars, by Retail Price Classes, 1921 to 1936* [1]

Year	Percent of total cigar production—cigars retailing at—					
	5 cents or less	Over 5 to 8 cents	Over 8 to 15 cents	Over 15 to 20 cents	Over 20 cents	Total
1921	30.2	27.8	39.2	2.7	0.1	100.0
1925	41.6	17.6	38.7	2.0	.1	100.0
1927	48.4	11.5	37.9	2.1	.1	100.0
1929	54.9	8.8	34.2	2.0	.1	100.0
1931	69.7	3.2	25.5	1.5	.1	100.0
1932	78.6	1.2	18.8	1.3	.1	100.0
1933	85.7	.7	12.9	.7	(2)	100.0
1934	86.1	1.2	12.0	.7	(2)	100.0
1935	87.5	1.4	10.2	.8	.1	100.0
1936	88.3	1.0	10.1	.6	(2)	100.0

[1] Data are from annual reports of Commissioner of Internal Revenue.
[2] Less than 0.05 percent.

Lower selling prices, while induced by competition, could have been made possible only through decreased costs of production. General wage reductions may have provided a part of the decrease. Costs of raw materials certainly dropped materially (table 2). However, economies made possible through improvements in techniques of manufacture must also have been a contributing factor. It is not possible to estimate the relative importance of each of these influences in the price reductions which took place in the industry.

It seems probable that, barring unforseen developments, the era of price reduction in the cigar industry is approaching an end. In the past it was aided by savings on both labor and materials. However, tobacco-leaf prices have been advancing since 1933. Wage rates since the depression have been extremely low, so further savings from this source seem unlikely.[5] The only other possibility for savings in cost would seem to rest with introduction of machinery into the still unmechanized part of the industry, but the substantial degree of mechanization already prevailing indicates that savings from this source would be small.[6]

It may be mentioned that, although the use of improved cigar-making machinery has lowered the cost of production, it has had a secondary effect in stimulating low-priced cigar consumption. Cigar-making machinery was first used and is still largely used in the manu-

[5] Monthly Labor Review, October 1935, Man-Hours of Employment in 35 Manufacturing Industries in 1933. Table 1 lists cigar manufacturing as thirty-fourth in a list of 35 selected industries according to average wages paid per man-hour.

[6] On the basis of data collected during the field survey and information contained in the annual reports of the Commissioner of Internal Revenue, it is estimated that of all cigars produced in 1936, 27 percent were short-filler and 73 percent long-filler, and that cigar machines were used in the manufacture of about 78 percent of all long-filler cigars. Mechanization of the manufacture of short-filler cigars in 1936 is estimated to have been at least as high as mechanization of long-filler manufacture.

facture of low-priced cigars where a steady demand is assured. Large-scale producers in this field have therefore consistently encouraged consumption of such cigars through advertising or other means at their disposal.

TABLE 2.—*Average Farm Prices of Domestic Leaf Tobacco Used for Filler, Binder, and Wrapper, 1919 to 1936* [1]

Year	Average farm prices [2] (in cents) per pound of domestic tobacco used for—			Year	Average farms prices [2] (in cents) per pound of domestic tobacco used for—		
	Filler	Binder	Wrapper		Filler	Binder	Wrapper
1919	18.8	29.7	78.0	1929	12.7	20.4	55.3
1920	13.5	24.6	75.0	1930	8.3	15.3	68.7
1921	13.2	14.2	70.6	1931	6.8	8.7	62.8
1922	15.2	20.5	70.7	1932	4.5	6.9	50.7
1923	16.5	21.9	83.3	1933	5.4	8.6	57.7
1924	14.9	16.2	73.1	1934	9.0	12.1	75.1
1925	10.7	15.3	83.8	1935	9.7	12.8	79.7
1926	9.9	20.2	83.3	1936	11.0	14.7	83.1
1927	13.7	19.0	86.9				
1928	14.9	17.8	76.3				

[1] Data are from U. S. Department of Agriculture, Crop Reporting Board releases of Apr. 16, 1934; June 15, 1935; Apr. 15, 1936; and May 10, 1937.
[2] Average prices of tobacco grown during seasons in years indicated.

To sum up, labor-cost savings made possible by increased use of improved, mechanized methods of cigar manufacture have been at least in part responsible for reductions in the average retail price of cigars since 1921. Also, to the degree that mechanization has permitted price reductions, it has probably assisted the cigar industry in competition with cigarettes, maintaining the total volume of cigar production at higher levels than would otherwise have been possible. The actual extent of this effect, however, is not subject to measurement.

Another change in the type of production since 1920 may be credited at least in part to mechanization. Before the introduction of cigar-making machines, short-filler cigars constituted a relatively insignificant proportion of all cigars manufactured. They were made principally to dispose of the scrap and cuttings produced as a byproduct of the manufacture of long-filler cigars. However, since 1920 the ratio of short-filler cigars to all cigars manufactured has been steadily increasing, as indicated by the statement showing the estimated percent [7] the short-filler cigars manufactured each year formed of total cigar production.

Of great significance is the fact that some concerns now manufacture short-filler cigars directly from whole leaf, utilizing a thresher which beats the leaf from the stem, this taking the place of the stemming

[7] These estimates are based on the amount of scrap tobacco reported used in the manufacture of cigars. This method, while not wholly satisfactory, is sufficiently accurate to indicate the steady increase in the proportion of short-filler cigars.

operation for the filler. In such factories, therefore, short-filler cigars become a primary product rather than a byproduct of the manufacture of long-filler cigars.

	Percent of short-filler cigars [1]		Percent of short-filler cigars [1]
1920	11.1	1929	16.5
1921	12.6	1930	20.3
1922	12.4	1931	22.2
1923	12.4	1932	21.3
1924	15.1	1933	21.0
1925	16.2	1934	24.4
1926	17.3	1935	25.9
1927	16.3	1936	27.2
1928	16.9		

[1] Computed as follows: The amount of scrap (filler) tobacco used in manufacture of cigars as given in annual reports of Commissioner of Internal Revenue was assumed to represent seven-tenths weight of all tobacco entering short-filler cigars (stemmed basis). This amount, compared to all leaf used in manufacture of cigars, was assumed to represent proportion of short-filler to all cigars manufactured.

It cannot be doubted that manufacturers are attracted by the substantial labor-cost savings made possible by use of short-filler cigar machines. Not only does manufacture of cigars by this method require about 42 percent less labor in the making department than where long-filler cigars are made by machine, and about 78 percent less than long-filler cigars made by hand, but a secondary saving is also possible through elimination of stemming of the filler.[8]

In past years consumers objected that short-filler cigars tended to shred in the mouth during smoking. Short-filler cigar machines, however, have been improved so that today scrap tobacco in larger sizes may be used, partially overcoming this tendency.

How much farther the manufacture of short-filler cigars may be expected to expand at the expense of long-filler cigars it is not possible to estimate. It is significant that as yet there is no sign of any halt in the steady increase in the proportion of total production represented by short-filler cigars.

Effects of Mechanization on Number and Size of Establishments

Cigar manufacturing was introduced on a commercial scale in this country about the year 1800. It was in general a small-scale industry, and a typical cigar shop was frequently the establishment of a single owner-worker. There was little change in the industry until after the Civil War.

Between 1870 and 1900, the mold, suction plate, and hand-bunching tool were introduced. Before this time no tools had been used save a

[8] Figures are taken from data collected during the field survey, and refer to cigars manufactured to retail at 5 cents each.

knife and a bench on which to work, so for the first time the matter of investment in equipment had to be considered by a prospective manufacturer. Moreover, the division of labor made possible by these tools gave a group of workers a slight efficiency advantage over a single individual. This period saw the establishment of the factory system of cigar manufacture.[9]

Nevertheless, small-scale manufacture continued to be most characteristic. There were some advantages in large-scale manufacture, but these were not such as to disqualify the small shop from successful competition. A small cigar factory could be started with very little money, and could compete on fairly even terms with larger long-established concerns.

Increasingly bitter competition, described by the Supreme Court as "fierce and abnormal",[10] had the effect of bringing about a combination of five important cigarette and tobacco manufacturing concerns in 1890 by the formation of the American Tobacco Co., known at the time as the "Tobacco Trust." This organization has influenced the history of every branch of the tobacco industry.

By acquiring other important concerns, the company established its position so strongly that by 1901 its proportion of the country's total output of plug and twist was 68 percent; of smoking tobacco nearly 60 percent; of snuff, over 80 percent; of cigarettes, 90 percent; and of "little cigars," 73 percent. The only important field that remained to be conquered was the manufacture of cigars, and to that task attention was next directed.[11]

The American Cigar Co. was incorporated as a part of the "Trust" in January 1901. Between 1900 and 1903 the "Trust" increased its proportion of the country's cigar production from 4.8 percent to 16.4 percent. These increases were due not only to the further absorption of independent concerns, but also to extensive advertising, price cutting, and the granting of premiums. The ambitious program, however, failed to accomplish the results expected, and the campaign was relaxed after 1903. At no time thereafter did the "Trust" make more than 15 percent of the cigars produced in this country. It was apparent that the cigar branch of the industry could not be captured so readily as had been the other branches of the tobacco industry.[11]

The principal reason for the failure of the company to establish itself in a dominant position in the cigar industry lay in the fact that machinery for making cigars had not been developed to such an extent as to disqualify the small manufacturer from successful competition. It is worth noting that the "Trust" succeeded in obtaining a strong

[9] Twelfth Census of the United States, vol. 9, pp. 671 et seq.

[10] 221 U. S. 157 (1911).

[11] Statistics are from United States Commissioner of Corporations, Report on the Tobacco Industry, Washington, 1909.

foothold [12] approximating a position near to monopoly, in the manufacture of "little cigars" where machinery was more successfully used.

The obvious way to establish supremacy in cigar production was to develop machinery for making cigars. This the company endeavored to do. It organized the American Machine & Foundry Co. in 1900 and later acquired the International Cigar Machine Co. The executive in charge was given the specific problem of developing automatic cigar-making machinery.[13] However, in 1911 the tobacco combination was declared to be in restraint of trade and was ordered dissolved by the Supreme Court of the United States,[14] and the shrewdly conceived plan was interrupted.

It was not until 1917 that the long period of research bore fruit and the idea of cigar-making machinery became a reality. And now there was no "Tobacco Trust" to use the machines. Their introduction depended on the antipathies and convictions of a large group of independent manufacturers.

It immediately became apparent that use of cigar machines was not suited to small-scale manufacture. Prerequisites to use of machines were:

1. A considerably larger investment in equipment than was required for hand manufacture.
2. An assured and uniform demand for a large volume of product to permit maximum efficiency.[15]
3. A stable location.

Practically all small concerns and a number of larger establishments, unable to meet these conditions, therefore found installation of machines impractical or impossible. To this group was added a number of producers who felt that consumers would not knowingly accept machine-made cigars, and who therefore hesitated to jeopardize their established brand names in a new field. Consequently, machines first found their way into a few large factories, and later gradually spread through the industry as other large units became convinced that machine-made cigars could be sold in competition with the hand-made product.

In 1921 small-scale operation remained the more common type. For example, of a total of 14,578 cigar-manufacturing establishments in business that year, there were only 11 manufacturing more than 40 million cigars each per year, and these together produced but 15.7 percent of the total output of the industry. Nearly as important

[12] United States Commissioner of Corporations, Report on the Tobacco Industry, Washington, 1915, part III, p. 195.

[13] Fortune (Jersey City, N. J.), June 1930.

[14] 221 U. S. 106 (1911).

[15] Machines are usually installed in batteries of not less than six, each machine having a rated capacity up to 1 million cigars per year in one shift of operation. Overhead costs on the investment required wipes out any advantages accruing to mechanized methods of operation if machines are permitted to remain idle for considerable periods.

collectively were 13,149 small establishments each manufacturing less than one-half million cigars per year, who together produced 13.7 percent of the industry's total. The greater part of all production, 70.6 percent, was contributed by the 1,418 factories each manufacturing more than one-half million but less than 40 million cigars per annum (table 3).

TABLE 3.—*Distribution of Cigar Factories According to Annual Output in Specified Years* [1]

Annual output	Number of factories with classified output in—				Percent of total production			
	1921	1926	1931	1936	1921	1926	1931	1936
All factories	14,578	10,247	7,138	5,292	100.0	100.0	100.0	100.0
Under 500,000 cigars	13,149	9,281	6,664	4,902	13.7	8.0	5.2	4.8
500,000 to 5,000,000	1,130	680	320	256	26.2	17.6	10.7	7.5
5,000,000 to 40,000,000	288	263	122	107	44.4	49.4	31.5	31.1
Over 40,000,000	11	23	32	27	15.7	25.0	52.6	56.6

[1] Data are from annual reports of the Commissioner of Internal Revenue.

The shrinking market following 1920 and the sharp competition it engendered made economies in manufacturing costs most important. In this situation, the labor-cost savings offered by use of cigar machines proved a decisive factor. But, as has been pointed out, because of intrinsic limitations, these machines were installed in the larger factories only.

As a result, the smaller concerns, most of which could not be mechanized, were at a competitive disadvantage and were forced to bear the brunt of the market decline. As the market drop continued and mechanization of large factories increased, smaller establishments gradually assumed a subordinate position. Mortality among them was high. In contrast, the largest establishments actually succeeded in improving their positions.

Thus, in a period of 15 years the number and type of cigar-manufacturing establishments changed radically. By 1936 there were but 5,292 concerns in business, a reduction of over 60 percent from 1921. The smallest establishments, those manufacturing less than one-half million cigars each per year, now numbered 4,902 and produced 4.8 percent of the total number of cigars made. Those establishments manufacturing more than one-half million but less than 40 million cigars each per year, which in 1921 represented 70.6 percent of the industry's total production, had declined in number to but 363 and contributed collectively but 38.6 percent of the industry's production. In contrast, the largest factories, those producing in excess of 40 million cigars each per year, during the same period increased in number from 11 to 27 and produced 56.6 percent of all cigars made in 1936, as compared with 15.7 percent in 1921 (table 3).

A part of the reduction in the number of establishments and the concentration of production in the larger of those remaining may be attributed to the market decline. However, the major factor responsible for these changes was mechanization. That mechanization operated as an important influence, independently of the market level, may be seen from the fact that, despite an increase in total production of from 4.3 to 5.2 billion cigars between 1933 and 1936, the number of cigar-manufacturing establishments decreased from 6,620 to 5,292, and production in factories with capacity in excess of 40 million cigars per year increased from 50.3 to 56.5 percent of the industry's total.[16]

Effects of Mechanization on Labor

TOTAL EMPLOYMENT

Perhaps the most direct effect of mechanization has been a reduction in the size of the labor force required by the industry. Between 1921 and 1935 the number of workers employed by the industry was reduced by half. The fall in the total volume of cigar production during this period was responsible for a large share of this decrease. The number of cigars produced by the industry in 1921 was 6.73 billions; in 1935 the number was 4.69 billions—a reduction of 30.3 percent.[17] This would account for a corresponding percentage reduction in the labor force, equivalent to 34,000 workers, but leaves a further decrease of 22,000 workers to be credited to other causes. Though no accurate records are available, hours of labor decreased substantially over the period 1921–35.[18] It follows that improvements in manufacturing techniques would have caused displacement of even more than 22,000 workers had this effect not been in part compensated by reductions in the average hours of labor.

	Wage earners in cigar manufacture [1]		*Wage earners in cigar manufacture*
1919	114,300	1929	84,200
1921	112,000	1931	68,200
1923	108,800	1933	54,600
1925	103,000	1935	56,000
1927	94,600		

[1] Data are from Census of Manufactures.

[16] Additional information on concentration of production may be found in "The Tobacco Study," Division of Review, National Recovery Administration, Department of Commerce, March 1936, pp. 178–180 (mimeographed).

[17] Annual reports of the Commissioner of Internal Revenue.

[18] The Census of Manufactures in these early years reports a frequency distribution of workers in the cigar and cigarette industries combined according to prevailing hours of labor. However, prevailing hours of labor in the cigar industry may or may not be closely correlated with actual man-hours worked. Even today working hours in hand cigar plants are relatively flexible. More satisfactory information for later years is available, but because of the uncertainty mentioned above, it has been deemed inadvisable to attempt estimates of average change in hours of labor over the period.

The question may be approached in a slightly different way. For each long-filler cigar machine the labor of about 4.59 persons is required in the fabricating department of mechanized plants.[19] An average of 3,706 long-filler cigar machines in use was reported in 1935. On this basis, it is estimated that machine factories making long-filler cigars employed about 17,000 workers in the fabricating departments of their plants in 1935.

The results of the field survey also indicate that about 2.64 times as many workers are required in the fabricating departments of factories using hand methods as in plants using cigar machines to make the same number of 5-cent long-filler cigars in the same time.[20]

It follows that to manufacture the same number of long-filler cigars by hand as were made by machine in 1935 would have required about 44,900 workers (2.64 × 17,000), or some 27,900 more than it is estimated were actually employed. This figure—27,900—approximately represents the hypothetical net displacement of workers from the industry in 1935 by reason of the use of long-filler cigar machines, always assuming the market could have been maintained despite added costs entailed in hand operation.

The long-filler cigar machine, though the largest single influence, has not been the only improvement in manufacturing techniques causing displacement of labor from the industry. Mechanization of manufacture of short-filler cigars must likewise have reduced the number of workers employed. Similarly, increased use of stripping machinery and conveyor equipment in factories must also have eliminated the need for some human labor. No data are available from which to estimate even approximately the number of workers displaced by these mechanical improvements. However, combining their effects with the effect of the long-filler machine, it probably understates the case to say that, in the absence of improvements in manufacturing techniques in the preceding two decades, 30,000 more workers would have been required to make the number of cigars produced by the industry in 1935.

Summarizing, it is estimated that the decrease in the volume of production of cigars between 1921 and 1935 resulted in the displacement of about 34,000 workers from the industry. A further displacement of about 22,000 wage earners is attributed to improvements in manufacturing techniques during the period. It is estimated that this latter number would have been in excess of 30,000 workers had

[19] An average of 9.55 hours of labor, including 8.32 hours of labor by machine operators, was found to be required to produce 1,000 cigars by means of the 4-operator machine. Since 4 operators are required to tend each machine, this represents 2.08 hours of machine operation. Therefore, the labor of 4.59 persons is required to each cigar machine (9.55/2.08). (Records of field survey.)

[20] It was found by the survey that to make 1,000 5-cent long-filler cigars required an average of 25.19 hours of labor in the fabricating departments of a hand factory as compared with 9.55 hours in a plant using cigar machines. Put in a slightly different way, this indicates that it would require the labor of 25.19 persons in the fabricating department of a hand plant to make 1,000 5-cent long-filler cigars in 1 hour as compared with the labor of 9.55 persons in a mechanized factory, or 2.64 times as many persons.

not reductions in the average hours of labor per wage earner in part compensated for the effect of mechanization.

The actual character of displacement of men by cigar machines is more complex than would be indicated by the totals given above. Hand cigar makers have in general not been employed as cigar-machine operators. Machine operators have most commonly been recruited directly from the ranks of unskilled labor, and many, if not most, have had no previous experience in the cigar industry. Installation of each machine then has usually caused the induction into the industry of a few new unskilled workers and the complete displacement of a greater number of skilled hand cigar makers. It is estimated that by 1935 about 44,000 such hand workers had been severed from the industry because of use of long-filler cigar machines alone, and, concurrently, that jobs had been provided for about 17,000 new workers who were brought in to run the machines.[21] The amounts which would have to be added to these figures to account for the effects of short-filler cigar machines cannot be calculated.

While the newly introduced workers have been in the main unskilled young women, those displaced have been of both sexes and principally in upper age groups. With a continuous diminution in the hand branch of the industry, these displaced workers have seldom been able to find other outlets for their skill within the industry. Moreover, being accustomed to indoor work of a highly specialized nature, they have had great difficulty in locating or in adapting themselves to employment in other industries. Employment dislocations caused by mechanization have therefore frequently caused great hardship and distress among displaced workers.[22]

TYPE OF LABOR EMPLOYED BY THE INDUSTRY

In addition to reducing the number of workers employed by the industry, mechanization has markedly changed the type of the labor force. About three-quarters of all employees in a hand cigar factory are cigar makers. These workers are skilled craftsmen who have gone through an apprenticeship period, usually of several years' duration, to acquire their skill. When a hand factory is mechanized, or is forced out of business by concerns using cigar machines, these skilled

[21] The records of the field survey show an average of 4.6 persons per machine required in the making departments of plants using long-filler cigar machines. Multiplying by the number of machines in use in 1935 indicates about 17,000 workers in the fabricating departments of such plants in 1935. About 2.64 workers are required in the making department of a hand plant to equal in output each person in the making department of a plant using long-filler machines. It is therefore estimated that the 17,000 workers in machine plants replaced the labor of about 44,000 workers who would have been required in the making departments of hand plants to produce an equivalent output.

[22] For summary of a case study of this subject see p. 1120 of this issue.

workers are replaced by machine operators classed as unskilled or semiskilled labor, usually recruited directly from the ranks of unskilled labor. As the industry has become mechanized, therefore, the labor force has gradually changed from a group consisting largely of skilled workers to one in which these workers form only a small minority.

At the same time the distribution of employment between the sexes has changed. Among hand cigar makers, prior to the introduction of machines, both sexes were represented. A report to the convention of the Cigar Makers' International Union in 1920 indicated that, of 111,400 hand cigar makers, 50,375 or 45.2 percent were males. Cigar-machine operators on the other hand have always been almost exclusively women.[23] Therefore, as mechanization has spread the proportion of males employed by the industry has steadily decreased.

A secondary effect applying to the hand branch of the industry may also be traced to mechanization. A special Census of Manufactures survey in 1933 indicated that of a total of 26,940 hand piece workers (predominantly hand cigar makers), only 31 percent were males. Comparison with the estimate of 45 percent in 1920 as given by the Cigar Makers' International Union indicates that there has been a substantial decrease in the proportion of males employed by the hand branch of the industry. This may be attributed to the difficulties of this branch in competing with mechanized factories. As hand production decreased and the amount of labor required was reduced, manufacturers tended to retain the female cigar makers, who in general were available at smaller rates of pay.

ORGANIZATION OF LABOR

Labor organization has had a long history in the cigar-manufacturing industry. Local unions were reported as early as 1845. In 1886 the Cigar Makers' International Union played an important part in the formation of the American Federation of Labor, and for many years was one of the strongest bulwarks of that organization. Samuel Gompers, long the president of the Federation, came from this union and remained its vice president throughout his career.

The union was a craft organization of skilled hand cigar makers. It laid great emphasis on sickness, unemployment, and death benefits and on the value of the union label. It used the strike as an industrial weapon very sparingly.

Mechanization has strongly affected the fortunes of this organization. Since unskilled workers form the majority of all those employed

[23] A special study of the cigar manufacturing industry made for the National Recovery Administration by the Census of Manufactures of 1933 covered 12,001 machine piece workers, predominantly cigar-machine operators. Of these all but 23 were women.

in mechanized factories, the union in general has not spread into such concerns. As machines have been introduced into more and more factories and the hand branch of the industry has become smaller, the membership of the union and its influence have declined. In 1910 the union had in excess of 50,000 members. From 1920 to 1930—a decade of mechanization—the union membership dropped from 41,000 to about 15,000. The depression years following 1930 made still further inroads into its membership, but an organization drive during the National Recovery Administration brought it back to about 15,000. Recently a number of local branches have been abandoned in places where machine introduction has made the position of the union untenable and the payment of unemployment benefits impossible.

WAGES

Average annual earnings of workers in the cigar industry averaged about $800 between 1921 and 1929. After 1929 they declined slowly, reaching a low of $551 in 1933. A slightly improved average of $598 recorded in 1935 was still below that for any other census year excluding 1933. The decline in the volume of production after 1920 and especially after 1929 probably accounts for a large part of the decreases shown.

Mechanization has acted as a mixed influence. Factories using cigar machines, operating more economically than concerns using hand methods, have not been under such pressure to reduce costs. From a superficial examination it appears that wage and hour schedules in most mechanized plants are relatively stable, and wages are not markedly out of line with those paid by other industries in similar localities for comparable types of labor.

TABLE 4.—*Annual Pay Roll and Average Annual Earnings Per Worker in the Cigar-Manufacturing Industry, 1921–35* [1]

Year	Annual pay roll	Average annual earnings per worker [2]
1921	$91,530,000	$817
1923	90,860,000	835
1927	76,470,000	809
1929	67,220,000	799
1931	46,070,000	676
1933	30,060,000	551
1935	33,503,000	598

[1] Data are from Census of Manufactures.
[2] I. e., annual pay roll divided by number of workers.

In the hand branch of the industry, on the other hand, the constantly increasing number of hand cigar makers displaced from the industry and thrown on the labor market has created an oversupply of such labor. No longer in a position to bargain through their union for

relatively high wages, many of these workers have been forced to accept whatever wages were offered. With hand manufacturers in a losing competitive struggle against mechanized concerns, these offers have frequently been meager. Mechanization has thus exerted a constantly depressing influence on wage rates in the hand branch of the industry. For the industry as a whole, the probable net effect of mechanization has been to force wage levels downward.

The influences cited above have resulted in an anomalous situation in which hand cigar makers—skilled craftsmen—frequently receive smaller rates of pay for their labor than machine operators—unskilled or semiskilled workers—making the same class of cigars. This was indicated to be true in 1933 by a special survey of the cigar-manufacturing industry made for the National Recovery Administration by the Census of Manufactures, which showed that in different plants the weekly earnings of female hand cigar makers making class "A" cigars ranged from an average low of $8.90 to an average high of $11.60, while those of female cigar-machine operators making class "A" cigars ranged from $10.71 to $13.62.[24] Again, a survey in March 1936 showed that in the industry as a whole female long-filler and short-filler cigar-machine operators averaged 37 cents per hour, while female "out-and-out" hand cigar makers received 36 cents per hour, female hand bunch makers 35 cents per hour, and female hand rollers 32 cents per hour.[25]

That the same influence operated in the plants covered by the present survey may be seen from the following tabulation of average hourly returns to hand cigar makers and cigar-machine operators found in the different factories:

	Average rates (cents) per hour
Hand-made cigars, selling for—	
Less than 5 cents each	25, 26, 34
5 cents each	28, 33, 35
Over 8 to 15 cents each	36, 41, 41, 43, 46
Over 15 to 20 cents each	46, 52
Cigars bunched by machine and rolled by hand, selling for 5 cents each	32, 35
Cigars made on 4-operator machines, selling for—	
Less than 5 cents each	36, 39
5 cents each	36, 38, 38, 43, 43
Over 8 to 15 cents each	47
Cigars made on 2-operator short-filler machines, selling for less than 5 cents each	30, 35, 42, 48

HOURS OF LABOR

What effect, if any, mechanization has had on the general level of hours of labor in the cigar-manufacturing industry is not clear. The

[24] Each manufacturer was asked to report the highest and lowest weekly wages paid in a scheduled week. All high rates and all low rates were then combined separately into an average high and an average low for the industry as a whole.

[25] Monthly Labor Review, April 1937 (p. 957).

average length of the workweek appears to have decreased, but how much of this may be attributed to increased use of machines is uncertain.

However, mechanization has had the unmistakable effect of tending to stabilize work schedules. Hours of labor in factories making cigars by hand, especially before the introduction of machines, were in general somewhat informal. In a study of the industry in 1911 and 1912, conditions of work were described as follows:[26]

> Many cigar-factory employees do not work all the hours the factory is open and work afforded. The work is so largely individual in many factories that the coming and going of employees does not interfere materially with the work of others and expensive machinery does not stand idle when he is absent * * *. No cigar factory visited keeps regularly a record of the time worked by its piece workers.

The situation described above does not obtain in mechanized units. There definite plant hours are established and employees are required to observe precise time schedules.

Mechanization and the Future

As a prelude to the consideration of mechanization in the future, the various types of concerns operating in the industry today should be appraised.

In the hand branch, a number of small shops remain—concerns of one or two workers depending on local demand or neighborhood trade to dispose of their product. Such shops (called "buckeyes"), though a common sight in our larger cities, are collectively of minor importance compared with the industry as a whole. A few large and a number of middle-sized concerns using hand methods remain. These factories depend upon the quality appeal of the term "hand-made" to counterbalance the cost advantage possessed by mechanized producers. In many cases, these concerns specialize in the production of higher-quality and higher-priced cigars. A third class of hand manufacturers, small in number, specializes in the production of special orders, small lots, and odd sizes or types of cigars. Because of the number of mechanical adjustments required, the use of machines is naturally not economical in this field.[27]

The fact that only 12 percent of all cigar production in 1936 consisted of cigars selling at more than 5 cents apiece, while an estimated 16 percent of all production were long-filler hand-made cigars, indicates that some of the lower-priced grades are still made by hand. It is probable that any further displacement of hand by mechanized methods will take place first in this field, perhaps later extending into higher-priced classes.

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[26] U. S. Bureau of Labor Statistics Bulletin No. 135.

[27] The dies in a cigar machine must be changed and the machine readjusted whenever the size or shape of cigar to be manufactured is changed.

The question as to the rate at which mechanization will spread through the remainder of the hand branch of the industry—even whether there will be further significant mechanization—cannot be definitely settled. Physically, there appears to be no bar to further mechanization. Cigars made by machines are successfully marketed today in all but the highest price classes, but this higher-quality group constitutes but a minor fraction of total production. The total volume of the "special order" type of business, in which use of machines is not economical, must also be small. Thus these two fields combined constitute but a small part of total cigar production.

Practically, the persistence of hand methods of manufacture on a significant scale seems to rest on two factors. The first depends on the selling appeal of the term "hand-made." As long as a group of consumers prefer cigars of this type, concerns will use hand methods to supply the demand. As has been suggested, this appeal is strongest in the case of higher-priced cigars. However, the net effect must depend in large part on the efforts, principally in the advertising field, of manufacturers themselves—efforts which naturally cannot be foretold.

The second factor deals with the question of wages. The original force impelling the industry toward mechanization was especially great because relatively unskilled workers using machines could produce more per hour than skilled and relatively well-paid hand cigar makers. This wage relationship has changed. The oversupply of skilled hand cigar makers on the labor market and the necessity on the part of many to obtain work on any terms have permitted some hand manufacturers to hire adequate numbers of these craftsmen at extremely low wage rates—in many cases at levels below those prevailing for machine operators in mechanized plants. Some hand manufacturers have thus been able to reduce labor costs so far that the difference in cost resulting from differences in productivity has been offset in part or perhaps in some cases completely by the extra costs entailed in using machines.[28] However, this is a precarious position, and any influence tending to reestablish wage differentials between hand cigar makers and cigar-machine operators, or tending to raise wages in the industry as a whole, would renew the drive to mechanization, though probably not with its original force.

In summary, the rate at which further mechanization may be expected to take place will probably be slower than in the past,[29] and will depend on factors which may not readily be evaluated with accuracy.

In any case, mechanization of the cigar-manufacturing industry has not much farther to go. Manufacture of long-filler cigars is about

[28] For instance, interest on added investment, power, lubrication, repairs and repair parts, depreciation, and royalties.

[29] Since 1932 the number of long-filler cigar machines in place in the industry has been practically constant. However, more efficient utilization of equipment still may have resulted in increases in the proportion of machine-made to total production.

three-quarters mechanized, and that of short-filler cigars perhaps to a greater degree. It does not seem, however, that a stable point has yet been reached, and some further mechanization will probably take place. The effects will probably be, in general, a continuation of those previously noted.

There is also a change taking place in the very character of the industry itself, a change which, though perhaps not directly caused by mechanization, would be impossible without it.

Formerly the cigar-manufacturing industry was a relatively loose, disorganized body. The typical establishment was small and sold its product in a localized market. The keystone of the industry was a group of craftsmen—skilled workers who made up the majority of all wage earners employed.

Today, the most important units in the industry are large factories, mechanized in every possible detail. These factories represent large investments and are run on a mass-production basis with efficiency as the watchword. The output of each of these units is huge, is distributed throughout the country, and is sold with the assistance of modern Nation-wide advertising.[30] Most of the workers in these factories are relatively unskilled.

At the beginning of the century the "Tobacco Trust" made determined attempts to obtain control of the cigar industry, without success. Today, with mechanization, concentration of production in the hands of fewer and larger concerns is taking place rapidly. Thus, through mechanization, the cigar-manufacturing industry is being transmuted from a small, localized form of enterprise to the status of a modern, mass-production industry.

WHAT BECOMES OF DISPLACED CIGAR MAKERS

THE RESULTS of a study of the general effects of mechanization in the cigar-making industry are presented in the preceding article.[31] The effects on the individual members of a selected group of workers are described in a recent case study of the industry by members of the staff of the National Research Project of the Works Progress Administration.[32] This case study concerns primarily a single plant

[30] In 1934 the four largest cigar-manufacturing companies made 31.0 percent of all cigars produced, and less than 30 companies made 53.6 percent. (See The Tobacco Study, Division of Review, National Recovery Administration, Department of Commerce, March 1936, p. 180.)

[31] See p. 1100 of this issue.

[32] U. S. Works Progress Administration. Cigar Makers After the Lay-Off: A Case Study of Effects of Mechanization on Employment of Hand Cigar Makers, by Daniel Creamer and Gladys V. Swackhamer, Washington, 1937. (National Research Project, Studies of Effects of Industrial Change on Labor Markets. Report No. L–1.)

which was mechanized in 1931, and in the light of supporting evidence from other sources,[33] the findings may be taken as substantially characteristic of the industry.

In the study in question, more than 600 male cigar makers were laid off in 1931, at the time of mechanization, and about 200 female machine operators were taken on to make a less expensive product by machinery. A detailed study was made, as far as information was obtainable, of the workers laid off and of the machine operators who were substituted. During the 5 years following the lay-off, the cigar makers as a group were unemployed 52.6 percent of the time. Those who became too old or were otherwise disabled for work accounted for 11.6 percent of the total elapsed time during the 5 years. Nineteen percent of the aggregate time was spent in employment in the cigar industry, but 9.0 percent of this time was spent in self-employment with comparatively inadequate income. The remaining 16.8 percent of the aggregate time was accounted for by employment outside of the cigar industry.

The tracing of the history of the displaced workers revealed that 5 years after the lay-off, about 13.0 percent of the workers were self-employed cigar makers. Many others who had tried self-employment in this way had failed to obtain a subsistence, although 17.0 percent of the displaced workers were employed, 5 years later, by others in the cigar industry. Many of these were employed intermittently in small handicraft shops, but some of them were employed in semiskilled or unskilled jobs in mechanized plants. The records of the men revealed wide searches for employment, but 25.0 percent found no work at all during the 5 years. Those who found employment were forced in most cases to accept casual jobs, with intervening periods of unemployment. Much of the work, especially in the small-scale cigar establishments, called "buckeyes," is more properly to be described as "disguised unemployment."

The effects of the transition on the displaced workers are summarized as a lowered standard of living even for displaced workers who obtained new employment; the exhaustion of the savings of virtually all of the displaced workers; and the dependence on relatives or on public relief by a considerable portion of the workers. The conditions created by the combined action of mechanization and declining total volume of production are described as likely to continue, and such adjustment as may prove to be possible must depend on social resources largely outside the industry.

[33] Among the sources mentioned are Technological Changes in the Cigar Industry and Their Effects on Labor, in the Monthly Labor Review, December 1931 (pp. 11–17); and The Effects on Women of Changing Conditions in the Cigar and Cigarette Industry, by Caroline Manning and Harriet Byrne (U. S. Department of Labor, Women's Bureau, Bulletin No. 100, Washington, 1932).

SICKNESS INSURANCE IN NORWAY [1]

ALTHOUGH the question of providing sickness insurance for Norwegian subjects had been discussed since 1890, the first law on the subject was enacted September 18, 1909, going into full operation July 1, 1911, and subsequently being amended several times. A law of June 6, 1930, repealed all former laws and serves as the basis for the system now in operation; this law was amended May 27, 1932, June 16, 1933, June 25, 1935, July 10, 1936, and June 17, 1937. The present system provides for both compulsory and voluntary insurance.

Under the law each municipality is to establish a sickness-insurance fund, or, if the municipal authorities find it necessary and the State Insurance Institution (*Rikstrygdeverket*) approves, a municipality may have more than one fund. In December 1936 there were 759 of these local funds. There were also 34 recognized private funds. Persons covered by private sickness-benefit funds which are recognized by the State Insurance Institution do not have to be members of the public funds. Many of the recognized private funds are sick-benefit funds set up by large industrial enterprises for their employees.

Coverage

COMPULSORY INSURANCE

All persons 15 years of age or over, in public or private employment, who receive wages or remuneration consisting wholly or partly of cash must belong to an insurance fund or an authorized sick-benefit fund. The law applies only to those whose total income does not exceed a specified amount, to be fixed by the Crown; at present this limit is 6,000 kroner per annum. The law also covers the following classes of workers: Servants who do not receive cash wages; certain agricultural workers, even though they do not receive cash wages; fishermen; apprentices and other trainees engaged in practical work, even though they receive no wages, when the work is considered a part of their training; and Norwegian subjects or persons domiciled in the Kingdom who sail under the Norwegian flag, participate in Norwegian whaling

[1] Data are from report of Ragnhild Dunker, American clerk at the American consulate, Oslo, Norway, October 8, 1937; International Labor Office, Geneva, Legislative Series, 1930 Norway 2, 1932 Norway 4, 1933 Norway 1; Industrial and Labor Information, July 22, 1935, p. 130, and August 2, 1937, p. 144; International Labor Review, October 1937, pp. 517-535; Norway, Rikstrygdeverket, Syketrygden, 1936, Oslo, 1938.

expeditions, or are employed at Norwegian whaling stations outside of the Kingdom.

The following classes of workers are exempt: Persons assured sick benefits under foreign laws during their employment in the Kingdom; persons working for public or private charitable institutions whose remuneration for the work has the character of relief; persons in the employ of a foreign country's minister or consul; persons whose employment, because of its nature, cannot last for at least 6 days (but employment need not be continuous and need not consist of full days to render membership compulsory); casual or temporary workers whose main employment is an independent occupation not subject to insurance; and persons whose services constitute secondary employment only, with remuneration not greater than 300 kroner per annum.

The insurance funds may, upon application, exempt from compulsory insurance persons whose capacity for work has been essentially reduced owing to chronic disease or other permanent infirmities, and also, with the approval of the State Insurance Institution, persons who for a small remuneration perform organized philanthropic work if they are assured sickness benefits of at least the same value as those provided by the existing law.

An insured person who temporarily works in another country for his employer retains his compulsory insurance in Norway for a period up to 6 months, as do also insured persons designated for service at Norwegian legations or consulates or in other Government employment outside of Norway, except that in the latter case the time limit does not apply. Compulsory or voluntary members who for other reasons live abroad may retain insurance-fund membership in Norway for a period up to 3 months.

VOLUNTARY INSURANCE

All persons 15 years of age and not over 70 years whose liability to insurance ceases or who are not subject to compulsory insurance may become voluntary members, subject to the same exemptions as compulsory members, and on the condition, among others, that the person's annual income, including that of his spouse, does not exceed the limits fixed by the Crown. Since July 3, 1933, however, voluntary membership has been extended to include persons with incomes in excess of the limits fixed ("extended" voluntary membership). An amendment promulgated June 17, 1937, makes possible, on a voluntary basis, insurance for benefit in kind only, the contributions being reduced accordingly; also Norwegian nationals employed on foreign ships may, under certain conditions, be voluntarily insured.

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Contributions

Under the existing law compulsory members pay six-tenths, the employer one-tenth, the State two-tenths, and the municipality one-tenth of the total contribution. Voluntary members pay the employer's share in addition to their own—that is, seven-tenths of the total contribution—whereas the so-called "extended" voluntary members pay the entire contribution. An amendment of June 17, 1937, provides that the contributions of voluntary members insuring for benefits in kind only are to be reduced proportionately.

A person who, at the time of becoming a voluntary member, is over 60 years of age must pay an additional contribution for the period since he became 60 years old, with the exception of any time when he was a member or was insured as a dependent in a sickness-insurance fund, at the rate in effect at the time of his becoming a member. Under no circumstances, however, will he be required to pay more than 1 year's contribution.

The law of June 18, 1935, which extended sickness insurance to all fishermen, provides that two-thirds of the contribution of the fishermen (which would normally be seven-tenths of the total contribution) is to be paid from a special fund raised by an export tax on fish. The State and the municipality are to pay two-tenths and one-tenth respectively of the total contribution, as in other cases.

According to the standard scale of January 1, 1934, the contributions for the different classes of members are as follows:

TABLE 1.—*Workers' Contributions for Specified Types of Insurance in Norway*

[Krone at par=45.4 cents; exchange rate at end of 1937 about 25 cents]

Wage class	Annual earnings	Contributions for specified insurance		
		Compulsory, per week	Voluntary, per 4 weeks	Extended voluntary, per 4 weeks
	Kroner	*Kroner*	*Kroner*	*Kroner*
Class 0:				
a.—Government employees		0.60	3.70	4.80
b.—Workers with dependents	0- 300	.55	3.70	4.80
c.—Workers with no dependents	0- 300	.25	1.90	2.40
Class 1	300- 600	.45	2.65	3.40
Class 2	600-1,000	.55	3.45	4.40
Class 3	1,000-1,500	.70	4.20	5.40
Class 4	1,500-2,100	.85	4.95	6.40
Class 5	2,100-2,800	1.00	5.90	7.60
Class 6	Over 2,800	1.25	7.15	9.20

Class 0–*a* includes persons in Government or municipal employment or in the employ of a sickness-insurance fund who are entitled to full pay for at least 3 months in case of sickness, when such employment is their main occupation. Employees of other official organizations who are employed under similar conditions may also be included.

If conditions warrant, the funds may, with the authorization of the State Insurance Institution, establish rates higher or lower than the standard scale.

According to the act, the total contribution is in principle distributed as follows: The insured person pays 60 percent, the employer 10 percent, the State 20 percent, and the local authority 10 percent. In reality the State fraction of 20 percent has never been entirely paid up. In accordance with other clauses of the act, one-fifth of the State contribution from 1911 to 1924 was used to constitute a Sickness Insurance Equalization Fund for assisting funds that were in financial difficulties. Since 1925 this fifth of the State contribution has gone back to the Treasury. An act of May 27, 1932, prescribed that the State contribution might be reduced by 50 percent when the net assets of the Equalization Fund amounted to 12 kroner or over per head of the insured population. A reduction of 45 percent was accordingly made in the financial year 1932–33 and a reduction of 50 percent in succeeding years. At present, therefore, the insured persons pay 66.7 percent of the total contribution and the employer, the State, and the local authority pay 33.3 percent, divided equally between them. * * *

The rates of contributions charged by the recognized sickness funds are fixed by the general meeting of each fund. The State pays a contribution equal to two-sixths of the amount of the contributions collected, and the local authority and the employer each pay one-sixth of this amount. The State contribution, however, was reduced in the same proportion as its contribution to the local funds.

Benefits

The right to benefits is, in every instance, contingent on the individual's being a member of a fund when the illness, relapse, or incapacity for work occurs. Illness beginning during any period when the individual was not a member of any insurance fund does not entitle him to benefits under this law, unless there have been no symptoms of the illness for at least 1 year, in which event it is considered a new illness.

Illness arising before membership has been in effect for 14 days does not entitle the individual to cash benefits unless it can be established that immediately prior to the illness he was a member of another insurance fund or approved sick fund for an equivalent period, or that the illness was caused by an accident. However, hospitalization, family benefits, and medical attendance are allowed during this period.

In computing the duration of the illness, there is included the time during which the member may have been the recipient of benefits for the same illness from other funds or from the accident-insurance fund for seamen, or the time during which the insured may have received treatment or care at public expense or at the expense of the military authorities.

Cash benefits are payable to insured persons who are incapacitated for work (sickness benefit), to insured women and the wives of insured persons during childbirth (maternity benefit), and under certain conditions to the members of an insured person's family (family benefits). The funds also pay funeral benefits. Benefits in kind include medical

attendance, hospitalization, physiotherapeutic and dental treatment, obstetrical assistance, and transportation for patients and physicians.

CASH BENEFITS

Cash benefits, in case of illness involving incapacity for work, are paid to members for not more than 26 weeks in any 1 year (12 consecutive months) nor more than 39 weeks for any one illness. If, after the expiration of 39 weeks, the member has become able to work and has paid contributions for at least 2 years thereafter, he is entitled to further benefits. In the case of tuberculosis or cancer, benefits are paid for 39 consecutive weeks in 1 year. Cash benefits are not paid for Sundays nor for the first 3 days (including Sunday) immediately following incapacity. Cash benefits begin at the earliest with the day when a physician was consulted, but exception may be made if it is established that the illness caused incapacity for work at an earlier date. If cash benefits for the same illness are awarded during different periods, these periods are combined in computing the total number of weeks. If the member has become capable of work and has paid contributions for at least 1 year thereafter, incapacity for work due to the same sickness shall be considered a new sickness. If a member is not entirely incapacitated for work, the insurance fund may grant 50 percent of the cash benefits.

The daily cash sickness benefits granted members in the various classes are as follows:

	Kroner
Class 0	0. 00
Class 1	. 80
Class 2	1. 40
Class 3	2. 10
Class 4	2. 80
Class 5	3. 60
Class 6	4. 00

Cash maternity benefits, equal to sickness cash benefits except that members of class 0 receive 30 kroner, are paid to members for 2 weeks prior to and 6 weeks following the birth of the child, but subject to the condition that the woman must have been a member of the insurance fund or of an approved sick fund for 10 months immediately preceding the birth of the child. Cash maternity benefits of 30 kroner are paid for the wife of a member, provided the husband has been a member of the fund for at least 10 months prior to the birth of the child. These benefits are payable for members in classes 1 to 6 for every day of the week except Sunday.

Cash family benefits are paid during a member's confinement in a hospital or a maternity home, at the rate of 25 percent of the cash sickness benefits for 1 dependent, 50 percent for 2 or 3 dependents,

and 75 percent for 4 or more dependents, and are payable for every day of the week except Sunday.

The cash benefit for funeral expenses, payable upon the death of a member or the spouse of a member is 75 kroner, and of a child or foster child, is 50 kroner.

BENEFITS IN KIND

The following benefits in kind are granted to members of insurance funds:

(*a*) Medical care, either in the form of free medical attendance by doctors with whom the funds have contracts, or as a refund to the members for medical care, in accordance with rates fixed by the Crown. These provisions also apply to attendance by midwives, in cases of confinement. The medical care to which members are entitled during the entire period of membership in an authorized insurance fund includes the extraction of teeth (but not if done in connection with bridge or plate work) and certain treatments habitually performed by dentists, the latter to be specified in an order of the State Insurance Institution.

(*b*) Physiotherapeutic treatments (i. e., baths, massage, X-ray, radium, etc.) prescribed by a doctor in accordance with the rules of the State Insurance Institution.

(*c*) Medical care and nursing in public hospitals or sanitariums in lieu of medical care and cash benefits. Hospitalization is paid for every day (including Sundays) from and including the day of confinement, up to a total of 39 weeks for any one illness, but not to exceed 26 weeks in any 1 year. If the illness is tuberculosis or cancer, however, hospitalization is payable up to 39 weeks in any 1 year. When hospitalization is awarded during different periods, these periods are to be added together in computing the total number of weeks. If the member has become capable of work and has paid contributions for at least 1 year thereafter, incapacity for work due to the same sickness shall be considered a new sickness.

(*d*) Nursing and medical care in public maternity hospitals in lieu of midwife attendance and cash maternity benefits. For members of classes 1 to 6 such hospitalization is allowed for a period up to 8 weeks, and for members of class 0, including member's wife, for a period up to 14 days. In the event of complications the confinement is regarded as a regular illness and benefits are awarded accordingly.

(*e*) Expenses of transportation of the patient to the doctor or hospital, and of the doctor to the patient, when necessary, which may be paid directly to the doctor or midwife, or refunded to the insured person. The rates are fixed by the State Insurance Institution.

The following benefits are awarded to members' dependents (spouse, and dependent children under 16 years):

(*a*) Medical care, as for members. Children and foster children under 7 years of age dependent on a member are granted medical care for congenital deformities.

(*b*) Physiotherapeutic treatments (i. e., baths, massage, X-ray, radium, etc.) prescribed by a doctor in accordance with the rules of the State Insurance Institution.

(*c*) Medical care and nursing in public hospitals for a period up to 26 weeks for a single sickness. The total time is computed by adding together periods of illness. If a fund has assumed responsibility for hospitalization of a dependent, and has placed the dependent in a hospital, the fund is liable for payments during the time stipulated by the law, although the person who maintains the dependent may subsequently cease to be a member or transfer his membership to another fund.

(*d*) Attendance by midwives in maternity cases, or medical care and nursing in public maternity hospitals for a period up to 15 days in lieu of midwife attendance and cash maternity benefits, subject to the condition that the husband must have been a member of a fund for 10 months immediately preceding the birth of the child. If necessary, hospitalization is allowed for a longer period.

For members as well as dependents, hospitalization in other than public hospitals is allowed only at the regular public hospital rates, except in emergency cases when hospitalization at such rates is not available.

Under existing law, members have freedom of the choice of physician. If the physician's fee is higher than that allowed by the insurance funds, the member must pay the difference between the authorized fee and that charged by the physician consulted.

In certain cities and districts the funds have contracts or agreements with the doctors, and in those places the members receive free medical care. If there are several doctors, the member may choose among them.

CONDITIONS GOVERNING PAYMENT OF BENEFITS

Benefits are payable only to insured persons who are domiciled in the Kingdom. The following classes are exempt from this rule:

(*a*) Members sailing under the Norwegian flag, if the vessel is engaged in foreign service, and members employed by whaling expeditions or whaling stations engaged in whaling activities outside of the Kingdom. No benefits are granted to dependents of such persons if the dependents are domiciled abroad and the member is not a Norwegian subject.

(*b*) Members employed temporarily abroad or in Norwegian Government service abroad.

(*c*) Members employed in Norwegian frontier districts, but residing beyond the Norwegian border.

Dependents of persons who are entitled to benefits in accordance with paragraphs (*b*) and (*c*) above are, in case of illness occurring abroad, granted benefits under the terms of the law, but not in excess of what the treatment would have cost in Norway. The State Insurance Institution may fix a rate for such payments.

The insurance funds may, wholly or in part, refuse benefits to the following classes:

(*a*) Persons for whom membership contributions have been paid only in part.

(*b*) Persons who, without satisfactory or legal ground, refuse to accept treatment in a hospital or maternity home when prescribed by a fund (but family benefits are to be paid in such cases).

(*c*) Persons who, without valid reason, furnish incorrect information or neglect to give reports or information required by the funds.

(*d*) Persons who, in case of illness, do not follow the orders of the doctors of the funds, or are guilty of gross carelessness in connection with their health.

(*e*) Persons who refuse to submit to examination by the medical inspector. If there is any doubt as to the physical condition of a member, the fund may have him examined by one of its own doctors, and at its own expense.

(*f*) Persons who, during sickness, leave the districts in which they are insured without permission.

An insured person who, willfully or as a result of intoxication, has brought about an illness forfeits the right to all cash benefits except family benefits, but the fund may in such case allow hospital treatment, requiring that all benefits paid for the illness be repaid by the insured. Likewise, an insured person who malingers or furnishes false information about his illness, employment, dependents, or earnings, and has received benefits to which he is not entitled, must refund the benefits granted.

The State Insurance Institution is responsible for any sickness caused by industrial accident and compensable under accident-insurance legislation and certain occupational diseases, such as lead poisoning, mercury poisoning, and anthrax, but the insurance funds must pay for treatment during the first 10 days thereof. It is also responsible for treatment of epidemic and tropical diseases of seamen for the entire period of their illness; otherwise the funds are responsible for treatment of seamen during the first 10 days.

AGE LIMITS FOR ELIGIBILITY TO SICKNESS BENEFITS

All compulsory and voluntary members of a sickness-insurance fund and their dependents, including children and foster children under 16 years of age, are entitled to benefits regardless of age. Children over 16 years of age become independent members.

Method of Settlement of Disputes

For the settlement of disputes between the members and the funds, each fund has a board of 3 members, before which all disputes are brought for decision. A member who is not satisfied with the decision of the board may appeal the case to the State Insurance Institution. While the board is bound by the decision of this Institution, the member has the right to take the case to court. Disputes between the municipalities and the funds, as to the obligations of the municipality, and disputes between two funds as to which fund is responsible, are referred to the State Insurance Institution.

Statistics are not available for the entire country. The Oslo Insurance Fund, which in October 1937 had approximately 160,000 members, had an average of 30 disputes per annum.

Administration

The central administrative body of the sickness-insurance funds is the State Insurance Institution (*Rikstrygdeverket*), under the direction of a board of 5 members, including the director of the Institution, the other 4 members and their alternates being appointed by the Crown for a period of 4 years. The expenses of the Institution in connection with the administration of the sickness-insurance funds are paid by the State. In addition to making the decisions specifically mentioned in this law, it is the duty of the Institution to supervise the management and the operations of the sickness-insurance funds, and the enforcement of the law in general. The Institution is under the jurisdiction of the Department for Social Affairs.

Each fund is individually responsible for its own obligations, however, and is managed by a board of 5 members, of whom 3 are insured members and 1 is an employer liable to the payment of contributions and their alternates. They are appointed by the municipality for a period of 3 years. It is the duty of the board to supervise the activities of the fund and to see that the law and regulations are observed.

Approved Private Funds

The State Insurance Institution may approve private sickness-benefit funds, such as works' funds, teachers' funds, and railway funds. Members of such approved funds are not required to belong to local public funds.

In order for a private fund to be approved, certain conditions must be met, such as a minimum regular membership, nonliability of members except for contributions, sufficient reserves, and supervision by the State Insurance Institution. Approval of the fund may be revoked if certain conditions appear.

The rates of contribution to approved funds are fixed by the general meeting of each fund. The State pays two-sixths of the contributions of the members, and the municipality and the employer each one-sixth of such contributions, but not more than 4 kroner from the State, and 2 kroner each from the municipality and the employer for each member. The State contribution has been, however, reduced, in the same proportion as for the local public funds. (See p. 1125.)

Statistics of Operation

The number of persons having compulsory and voluntary sickness insurance in local public funds and of members of recognized sickness-benefit funds in Norway from 1931 to 1936 is shown in table 2. In other tables, however, the data are for official funds only.

TABLE 2.—*Members of Local Sickness-Insurance Funds and of Recognized Sickness-Benefit Funds, in Norway, 1931 to 1936, by Years*

Year	Local public funds			Recognized private funds
	Total	Compulsory	Voluntary	
1931	635,379	536,628	98,751	11,934
1932	647,649	543,927	103,722	12,183
1933	669,597	556,325	113,272	11,884
1934	706,574	582,251	124,323	11,931
1935	751,660	616,208	135,452	12,220
1936	896,553	755,084	141,469	12,169

Table 3 shows the cash resources of the local sickness-insurance funds in Norway from 1931 to 1936, by years.

TABLE 3.—*Resources of Local Sickness-Insurance Funds, in Norway, 1931 to 1936, by Years* [1]

Year	Total	Contributions of members (compulsory and voluntary) and employers	State contributions	Contributions of local authorities	Other resources
	Kroner	*Kroner*	*Kroner*	*Kroner*	*Kroner*
1931	35,215,314	25,413,410	5,734,565	3,577,925	489,414
1932	34,533,825	25,576,846	4,872,457	3,593,043	491,479
1933	35,730,358	27,430,887	3,748,881	3,547,510	1,003,080
1934	38,536,023	29,715,477	4,094,820	4,077,525	648,201
1935	42,531,514	31,766,922	5,216,211	5,175,046	373,335
1936	49,013,534	35,445,170	5,397,604	5,374,214	2,796,807

[1] Average exchange rate of kroner in 1931=24.69 cents; 1932=17.91 cents; 1933=20.76 cents; 1934=25.16 cents; 1935=24.50 cents; 1936=24.9 cents.

In table 4 are detailed the types of assistance rendered by local sickness-insurance funds in Norway from 1931 to 1936, by years.

TABLE 4.—*Number of Cases in Which Benefits Were Paid by Sickness-Insurance Funds in Norway, 1931 to 1936, by Years*

Year	Number of cases of sickness	Total days of benefits		Number of deaths	Number of births
		Sick benefits	Hospitalization		
1931	199,144	4,101,630	1,120,164	6,121	22,195
1932	193,522	3,948,082	1,148,500	5,983	21,119
1933	201,046	3,873,084	1,235,733	5,578	19,841
1934	212,901	4,078,048	1,253,270	5,783	20,555
1935	227,625	4,421,527	1,382,817	6,277	20,896
1936	249,791	4,708,696	1,445,446	6,256	21,416

TABLE 5.—*Expenditures of Local Sickness-Insurance Funds in Norway, 1931 to 1936*

Benefits	1931	1932	1933	1934	1935	1936 [1]
	Kroner	*Kroner*	*Kroner*	*Kroner*	*Kroner*	*Kroner*
Total expenditures	35,159,562	35,021,240	35,203,434	37,976,946	42,539,933	47,715,045
Cash sickness benefits	8,657,224	7,990,954	7,636,930	7,883,365	8,542,192	9,210,186
Ordinary hospitalization	8,713,642	9,102,763	9,857,178	10,990,471	11,743,762	13,658,559
Medical attendance	9,192,913	9,313,375	8,776,956	9,748,773	10,558,696	12,446,196
Medical inspectors	37,638	40,681	54,765	68,760	83,263	72,569
Cash family benefits	270,965	276,356	[2] 276,148	[3] 283,523	[3] 302,813	317,485
Dental benefits	782,795	909,467	1,002,846	1,159,182	1,283,004	1,557,245
Transporting patients and doctors	1,472,775	1,501,833	1,593,410	1,779,615	1,977,008	2,638,421
Physiotherapeutic treatments and medicines	1,252,854	1,176,236	1,239,596	1,327,539	1,482,342	1,605,076
Cash maternity benefits	604,291	568,933	[2] 523,122	[2] 525,368	[2] 524,757	572,010
Maternity hospitalization	214,816	239,874	292,556	328,711	379,561	428,437
Attendance of midwives	396,024	383,287	329,911	333,587	331,371	360,388
Funeral benefits	418,442	409,041	382,146	399,043	434,460	509,307
Interest and other expenses	114,224	136,925	246,841	405,452	1,786,974	723,524
Administrative expenses	3,030,959	2,981,515	2,991,029	3,013,547	3,109,730	3,615,642

[1] Data for this year include benefits to fishermen, who became subject to sickness insurance by an act of June 1935.
[2] Does not include family benefits when insured woman is admitted to maternity hospital.
[3] Includes family benefits when insured woman enters maternity hospital.

TABLE 6.—*Average Benefits per Member Under Sickness-Insurance Law in Norway, 1931 to 1936, by Type of Benefits and by Years*

Benefits	1931	1932	1933	1934	1935	1936 [1]
	Kroner	*Kroner*	*Kroner*	*Kroner*	*Kroner*	*Kroner*
Total benefits	55.33	54.07	52.57	53.76	56.59	53.22
Cash sickness benefits	13.63	12.34	11.41	11.16	11.36	10.27
Ordinary hospitalization	13.72	14.05	14.72	15.56	15.62	15.24
Medical attendance	14.47	14.38	13.10	13.42	14.05	13.88
Medical inspectors	.06	.06	.08	.10	.11	.08
Cash family benefits	.42	.43	[3].41	[3].40	[3].40	.36
Dental benefits	1.23	1.41	1.50	1.64	1.71	1.74
Transporting patients and doctors	2.31	2.32	2.38	2.51	2.63	2.94
Physiotherapeutic treatments and medicines	1.97	1.82	1.85	1.89	1.97	1.79
Cash maternity benefits	.95	.87	[2].78	[2].74	[2].70	.64
Maternity hospitalization	.34	.38	.44	.47	.50	.47
Attendance of midwives	.62	.57	.49	.47	.44	.41
Funeral benefits	.66	.63	.57	.56	.58	.56
Interest and other expenses	.18	.21	.37	.57	2.38	.81
Administrative expenses	4.77	4.60	4.47	4.27	4.14	4.03

[1] Data include benefits to fishermen.
[2] Does not include family benefits when insured woman is admitted to maternity hospital.
[3] Includes family benefits when insured woman enters maternity hospital.

Table 5 itemizes the expenditures of Norwegian sickness-insurance funds from 1931 to 1936, by years.

The average value per member of benefits under the Norwegian sickness-insurance law, by years and by type of benefits, from 1931 to 1936, is shown in table 6.

Total reserves in all the funds in operation during the years 1931 to 1936 were as follows:

	Kroner
1931	16, 732, 830
1932	15, 197, 417
1933	14, 986, 998
1934	14, 711, 068
1935	13, 710, 751
1936	14, 109, 409

CONDITION OF BRITISH UNEMPLOYMENT-INSURANCE FUND IN 1937

A BALANCE of over 60 million pounds in the British unemployment-insurance fund is shown in the financial report[1] of the Unemployment Insurance Statutory Committee for the year 1937. The receipts in the general account for the calendar year were £64,966,913, of which all but £683,225 represented insurance contributions by employers, employees, and the State. The expenditures amounted to £43,565,187 of which £33,160,000 were expended for unemployment benefits. In the agricultural account the receipts were £1,877,628 of which all but £17,997 represented contributions from employers, employees, and the State, and the expenditures amounted to £700,016, of which £455,000 were paid for benefits. The administrative costs and minor items in the two accounts amounted to £5,405,187 and £245,016, respectively. The sum of five million pounds was paid towards the reduction of the indebtedness of the fund. Under the 1936 act relating to agriculture, contributons became payable May 4, 1936, and benefits from November 5, 1936.

The following table shows the approximate receipts and payments of the general account and of the agricultural account of the unemployment insurance fund for the years 1936 and 1937, with the balance in the account at the end of each year, prepared for the Unemployment Insurance Statutory Committee. This is not an audited account, but it is in the same form as the accounts of the fund which are presented to Parliament after audit for the financial year ending on March 31.

[1] Great Britain. Ministry of Labor. Reports of the Unemployment Insurance Statutory Committee on the Financial Condition of the Unemployment Fund on December 31, 1937. London, 1938.

Receipts and Expenditures of British Unemployment Insurance Fund, 1936 and 1937

Item	General account		Agricultural account	
	1936	1937	1936	1937
Receipts	£65,707,238	£64,966,913	£793,550	£1,877,628
Contributions from:				
Employers and workers	43,154,043	42,724,771	529,000	1,244,000
Defense Departments in respect of men discharged from H. M. forces	526,836	161,242		
Exchequer	21,788,160	21,397,675	264,200	615,631
Interest on investments	226,251	674,105	350	17,826
Miscellaneous receipts	11,948	9,120		171
Expenditures	65,707,238	64,966,913	793,550	1,877,628
Insurance benefits	38,010,000	33,160,000	46,500	455,000
Refunds on contributions in respect of noninsurable employment	104,560	90,663	418	3,543
Repayments in respect of yearly and half-yearly hirings			182	9,195
Grants for authorized courses of instruction	300,467	430,600		1,400
Grants toward traveling expenses of insured persons seeking employment	14,741	13,924		16
Administrative expenses	4,750,000	4,870,000	99,075	230,862
Debt service	5,000,000	5,000,000		
Surplus	17,527,470	21,401,726	647,375	1,177,612
Balance on Dec. 31	38,977,280	60,379,006	647,375	1,824,987

During the first part of 1937 unemployment decreased rapidly, and from June to September it was below 10 percent. Although this decrease resulted in a considerable increase in the balance above expectations, a rise in the unemployment percentage from 9.5 in September (based on the revised method of taking the count of the unemployed) to 11.8 in December resulted in a smaller increase than might have been expected from the experience in the first three-quarters of the year.

In 1935 the Economic Advisory Council submitted a statement to the committee on which estimates of the future trend of employment could be based. In making the estimates both a 10-year period and a complete trade cycle, assumed to be 8 years, were considered, and from these figures it was estimated that the rate of unemployment for the next trade cycle from 1936 to 1943 would be a mean of 16.75 percent and that 48 percent of the unemployment would rank for benefit. It was expected on this assumption that 1936 and 1937 would be relatively favorable years in the trade cycle, and that even with the reduction in contributions which was then proposed there would be large additions to the surplus. It was estimated that out of any balance at the end of 1937 £37,597,000 must be regarded as a reserve for depression and that the cost of the reduction of the waiting period from 6 to 3 days and the lengthening of the benefit period, which were made effective in 1937,[2] could be made out of the disposable surplus. The amount required for these purposes at the end of 1937, therefore, was £52,963,000, but the actual balance at the end of 1937 in the general account exceeded the requirements by £7,416,000. The sudden change in the course of unemployment in the latter part of 1937 made this surplus less than had been expected, but this is said

[2] See Monthly Labor Review for May 1937 (p. 1128).

to be the least of its effects, since it changed the prospects for 1938 and thereafter.

It was considered from an appraisal of the economic situation by the Committee on Economic Information of the Economic Advisory Council, and taking into consideration the unemployment situation in the last of the year, that the possibility that industrial activity may continue to decline steadily and at a fairly rapid pace must be considered. However, in spite of this fact, the committee considered that the achieved surplus of £7,416,000, at the end of 1937 might be used for the improvement of benefits or the lowering of contributions. At the end of 1936 the surplus was spread over the 8 years 1937–44, and allowing for interest and delay in bringing changes into force, the annual sum of £2,250,000 was allocated to the improvements mentioned. The expenditure of the surplus for improvements lowers the balancing point of the fund, and after the changes in 1936 and 1937 the balancing point of unemployment for the fund was 15.4 percent. If the surplus is used for the reduction of contributions or improving benefits from 1938 to 1945 to the extent of £1,000,000 a year, it will bring the balancing point to 15.1 percent.

A comparison with the basis established 4 years ago, when the expenditures and benefits were adjusted to make income and expenditure balance at an unemployment rate of about 18.1 percent, raises the question whether it can be assumed that for any time in the future the mean rate of unemployment will be as low as 15.1 percent. After due consideration of all the factors, the committee decided that the present surplus might be converted to an annual surplus of £1,000,000, but that almost certainly this procedure cannot be repeated in later years.

The committee has power under the Unemployment Insurance Act, 1938, to apply part of the unemployment fund toward the reduction of the funded debt of £103,122,381 and is no longer restricted to disposable surplus. Any reduction in the debt brings a proportionate reduction of the debt charge, which has been fixed at £5,000,000 a year. The present debt charge represents nearly 5 percent on the amount of the debt, part of which is interest and part sinking fund. In applying anything but disposable surplus to the reduction of the debt, the loss of expected interest must be set against the reduction of the debt charge. It is estimated that the gain through reduction of the debt and the debt charge will amount to about 2½ percent. But against this immediate gain must be set the risk of later loss if it should become necessary to borrow again.

Although the new act allows long-term borrowing, the committee considered it was not justified in using balances for the debt reduction which might result in such long-term borrowing, but that debt reduction should be made only to the extent that it could be reasonably expected that if forced to borrow again it should be only for the short

periods provided for by the act of 1935. The committee considered it reasonably sure that in 1938 and 1939 unemployment would still be low enough to allow the unemployment fund to increase instead of diminish, and it was recommended, therefore, that £20,000,000 of the resources of the fund should be applied to reduction of the debt. Adding the saving of £500,000 a year through reduction of the debt to the £1,000,000 of disposable surplus makes a total of £1,500,000 a year which the unemployment fund seems likely to be, and to continue to be, in excess of its liabilities.

Representations were made by various groups—employers, trade-unions, and other organizations—either for or against the use of surplus funds for reducing the rate of contributions, increasing benefits, and reducing the waiting time still further. It was found by the committee that it would be impossible to reduce the contributions for all classes of contributors, and that such reductions as could be made for women and boys and girls of 16 to 17 years would not be of very material benefit and would leave the scheme of contributions unbalanced. On the other hand, it was considered that extending the period of benefit would have the effect of helping men with good industrial records and make it less likely that they would have to apply for assistance subject to the means test. This extension of the period of benefit, instead of further reducing the waiting period, was regarded as the most important use which could be made of the surplus. The majority of the committee recommended, therefore, that for benefit years beginning on and after January 1, 1938, the number of additional days of benefit should be increased for men who have worked regularly during the past 5 years while drawing relatively little in benefit, and that from April 1, 1938, the benefit for adult dependents should be increased from 9s. to 10s. a week.

In view of the short period during which the agricultural unemployment insurance scheme has been in effect, the committee did not consider it advisable to recommend any radical changes in the scheme. It was proposed that the waiting period should be brought in line with the general system and reduced from 6 days to 3. From the 1937 experience it was concluded that the present benefit rates can be supported by a lower rate of contribution, and a cut of ½d. in the weekly contribution rate for both employers and workers was recommended for adults and for young men and women between the ages of 18 and 21. The benefit rate for young men between the ages of 18 and 21, it was considered, should be raised from 10s. 6d. to 12s. per week. Finally, it was proposed that as of July 4, 1938, the provision requiring 10 contributions as a requalification for benefit should apply only where a man has exhausted his benefit through drawing 300 days in a benefit year and not where he has exhausted benefit under the rule proportioning benefit to unexhausted contributions. It is estimated that these changes will increase the expenditure of the fund in the agricul-

tural account by approximately £42,500 a year and will decrease the income by about £180,000 a year.

The recommendations of the majority of the committee for the general account and the unanimous recommendations for the agricultural account were adopted by the Government and approved by Parliament, and the orders were made by the Minister of Labor, March 25, 1938.[3]

ARTISTS AS MANUAL WORKERS UNDER BRITISH SOCIAL INSURANCE

THE narrow line between creative art and manual labor was the subject of a recent court decision in England by which two sculptors employed in a motion-picture studio were brought within the scope of the national unemployment and health insurance acts.[4]

The case (*Gaumont British Picture Corporation, Ltd.* v. *Maschek and Tyrrell,* King's Bench Division, High Court of Justice) concerned two model makers whose earnings exceeded £250 a year. Under the British unemployment insurance and health insurance systems, "nonmanual" workers whose income is in excess of that amount are not covered by the laws and are not eligible to benefits. The work of the men involved in the case consisted in making clay, wax, or plasticine models, to minute specification, for use in motion-picture sets. Formal decisions of the Minister of Health and the Minister of Labor declared that this was not manual work and that the men were therefore not in insurable employment. These decisions were appealed to the High Court and the case was heard on December 9, 1937.

The decision of the High Court allowing the claim of the appellants to the protection of the social insurance laws declared in part:

> I think it would be very difficult and very dangerous to attempt to lay down any form which could be applied with any rigidity to any particular case. That can be seen at once when one thinks of the instances which were discussed in the argument of the case. * * * You cannot draw any hard and fast line between the man who cuts patterns in soft stone and the man who from that becomes a monumental mason, and gradually goes on and on and may end up by being a first-rate sculptor. You cannot really draw an *a priori* line which would enable anybody to say that A is on this side and B is on that. The matter must always rest in the last resort upon the opinion formed based upon the facts of the individual case.
>
> Now in the present case it seems to me that, having regard to the evidence, these particular people were not regarded as people who could be trusted to create, but that they were supplied, as far as possible, with every detail to enable them to produce not anything which it was in their minds to create, but something which the art director of their employers had thought of, had invented, and wanted to be brought into being. * * * I think these two men are on the side of the line which makes them to be employed by way of manual labor and, therefore, that they are employed persons within the acts.

[3] Ministry of Labor Gazette, April 1938, p. 130.
[4] Great Britain. Ministry of Labor Gazette, February 1938, p. 76.

CAUSES OF DISCRIMINATION AGAINST OLDER WORKERS

DISCRIMINATION in the employment of middle-aged workers exists in practically all the industrial areas of New York State, according to the preliminary report of the joint legislative committee of that State, appointed under a concurrent resolution of May 7, 1937, to investigate the subject.[1]

During several months of investigation hearings were held and expert opinions received in the great industrial centers of the State. Representative employers, members of labor organizations, veterans' organizations, and many other groups interested in the subject gave testimony. It is estimated that the witnesses appearing before the committee represented about 1,750,000 employees or about 31 percent of the gainfully employed in the State. In the judgment of the committee, it would not be fair to the people of the State nor to the legislature to attempt to make specific recommendations as to remedial legislation until a complete and thorough inquiry has been made.

The 21 alleged causes of discrimination, as disclosed at the hearings, and the committee's comments thereon are summarized below.

(1) *Increased rates of compensation insurance.*—According to the findings of the committee, the middle-aged employees do not cost employers more for workmen's compensation insurance than do the younger members of their force. One of the leading authorities on rate making in New York State declared at a hearing that "the question of age does not enter as a factor in compensation rates at all. We recognize a great many factors, but we do not take cognizance of age." He also declared that the argument that the hiring of persons over 40 is too costly because of compensation costs is "absolutely wrong."

(2) *Higher accident rate.*—On the basis of its investigation the committee was of the opinion that middle-aged workers are less liable to accidents than are younger workers, but recover more slowly, not because they are subject to more serious accidents but because they require a longer period to recuperate.

[1] New York. Legislature. Preliminary Report of Joint Legislative Committee on Discrimination in Employment of the Middle Aged. Albany, 1938.

(3) *Greater susceptibility to occupational diseases.*—The committee found that it is undoubtedly true that middle-aged workers are more likely than younger workers to contract occupational diseases. This is particularly true of unskilled wage earners, but is not so marked among skilled workers.

Medical authorities are agreed that from the fortieth year, there is a marked physiological degeneration which becomes accelerated with the passing of time and which ends with death. When the process of physiological involution does set in, the degeneration is speeded up greatly, is more widespread, and many more impairments become evidenced in a shorter period of time among wage earners than among higher social groups.

(4) *Insurance companies urge employment of younger men.*—The committee had some evidence that insurance companies do urge employers not to hire older workers, but it is not in a position to report the extent of such practice. Should the committee be continued, it intends to go deeply into this matter. Meanwhile, it points out that the Massachusetts Department of Labor and Industries had the same charges submitted to it, even though they were backed by no proof.

(5) *Increased rates of group insurance.*—Considering group insurance from the viewpoint of the greatest good for the greatest number, the committee declared its belief that this kind of insurance benefits more middle-aged workers than it deprives of jobs. In the committee's opinion, group insurance is a progressive step in the right direction.

Reference was made to an address by the vice president of the Equitable Life Assurance Society of the United States before the National Association of Manufacturers in New York City, October 15, 1929, in which he stated that of 516 group-insurance patrons who replied to a questionnaire sent to 1,600, 60 percent stated definitely that they used no maximum hiring-age limit. In this connection the committee pointed out that only about one-third of the 1,600 employers answered the inquiry, and that it seems safe to assume that those who replied would be more favorable than those who did not, because manufacturers, especially the large employers, have not cared to admit any discrimination in the hiring of older workers. The committee here also quoted from the testimony of the director of the division of statistics of the Department of Labor and Industries of Massachusetts, that in the course of the survey made in that State concerning older workers a large number of employers explicitly reported that they used no maximum hiring-age limit, whereas further investigation showed that many of them actually did have such limits, often without realizing it.

(6) *Increased rates for employers under own pension plans.*—This subject is so complicated that it might well call for the services of experts over a protracted period before adequate recommendations

could be made. It is suggested, however, in the report under review, that any pension plan requiring direct contributions from employees should be supervised by the State insurance department. Moreover, pension plans for similar industries should be worked out along standardized lines so that a discharged or laid-off employee could hire out to another establishment without losing pension rights.

(7) *Physical unfitness in middle age*, and (8) *refusal of employers to hire men with minor disabilities because of greater compensation-insurance hazard.*—Physical unfitness in the older worker is undoubtedly his greatest handicap in securing a job, and is a double hindrance in the case of the unskilled worker. Considering the fact that from 2,000,000 to 2,400,000 persons meet with nonfatal accidents each year in the United States, the industrial worker is held to be fortunate indeed who reaches 40 years of age without having had an accident which prevents his reemployment.

The committee collected some data on the subject and is making further investigations, which it believes will disclose an amazingly high rate of employables over 40 years of age with physical defects resulting from industrial and other accidents.

The committee has under consideration the following recommendations:

(*a*) That all employers who require the physical examination of applicants for work keep records of all those examined.

(*b*) That when an applicant is not hired because of a physical defect, the defect be noted, with a certification to the rehabilitation division of the New York State Educational Department by the employer, stating whether or not the applicant will be employable if his defect is corrected.

(*c*) That if, upon investigation, it is found that the individual can be rehabilitated, at a maximum cost to be fixed for each particular case that the State handles, the requisite correctional treatments be undertaken.

(*d*) That such benefits be available only to persons who have been residents of the State of New York for a period of 2 years immediately preceding the application.

(*e*) That the present rehabilitation division of the New York State Educational Department be made a part of the State department of labor, and that the necessary legislation be enacted for the purpose of effecting the change, together with such appropriation as shall be found to be necessary for its establishment and support.

(9) *The speed-up in industry* and (10) *displacement of middle-aged workers by modern machinery.*—It is common knowledge, the committee asserted, that for the past 20 years, except during the World War, a large number of employable men and women without work have been constantly in quest of jobs which did not exist. This

apparently indicates that, with greater improvements in machines and methods, even larger groups will be unemployed. The committee stated, however, that "it is reasonable to assume that the problem can be remedied if it be given half the thought that has been expended in the improvement of machinery for greater production."

(11) *Industry's preference for younger men who can be hired more cheaply and trained more readily,* (12) *middle-aged less efficient than younger men,* and (13) *public demand for younger people in certain occupations.*—It is claimed that, as younger men have less responsibility, they will work for less compensation, and because they are in better physical condition the employer can get more out of them at less cost. While in some cases, no doubt, greed is the basis of this practice, more frequently it is due to the extreme competition prevailing in particular industries. Such practices should be discouraged. This, the committee thinks, may be done by ascertaining the age distribution of the workers in these industries and then prevailing upon the employers to maintain the proper age balances.

In some industries employers insist upon employing younger persons because they train more readily than older men and women. This is particularly true in trades calling for manual dexterity. For example, testimony was given to the effect that in the weaving trades it is next to impossible to train men and women over 30 years of age. The committee declared, however, that where a trade is not so dependent upon manual dexterity and agility of the body "there is no reason to say that the older worker cannot be trained just as readily as the younger man." While admitting that there are some jobs in which older men cannot compete with younger workers, the committee stated that it had yet to hear any convincing evidence that the middle aged are less efficient than the younger men.

The public demands younger persons in some occupations and the employer is compelled to concede to these demands. The committee has received considerable testimony to the effect that there are no demands for waitresses that are not young and attractive. The same thing is said to apply to store clerks and generally to all positions dealing directly with the general public. Stenographers and office workers say they cannot find positions when they become middle-aged, and this has been verified by employment agencies. In addition to the above there has been a host of others who have told the same story.

(14) *Lack of educational qualifications requirements.*—It is said that older men who have not the equivalent of high-school or trade-school educational qualifications are difficult to train for precision work. Furthermore, it is alleged that many of the middle-aged workers have not sufficient education to write legibly or figure accurately. The committee conceded that these allegations are well founded, as a study of the educational statistics of the United States discloses. The great majority of persons now in the middle-aged

group were educated more than 20 years ago "when standards were not as high or compulsory education as rigidly enforced as at present."

In this connection the suggestion has been offered that educational courses be established for older workers, with a view to fitting them for competition with younger and better-educated applicants.

(15) *Loss of skill during lay-off in depression* and (16) *lack of skilled workers among middle-aged.*—Evidence was presented to the committee indicating that some men have lost their mechanical skill on account of lay-offs during the depression years. No one knows how large this group is. Employers who testified reported that with a few exceptions they were able in a very brief period to retrain these workers to their former skill.

Employers were in agreement regarding the inadequate supply of skilled workers among middle-aged applicants. The committee was of the opinion that undoubtedly a large number of men who were previously good craftsmen are conscious of their loss of skill, have no courage to apply for their former jobs, and are on relief or have drifted into lower-grade occupations.

(17) *Skilled workers eliminated by changes in methods,* and (18) *by industries going out of business.*—Numerous new processes of production have eliminated numbers of skilled workers; for example, arc welding of large steel castings and the cracking of petroleum by continuous process. Among the many automatic machines in common use are the bottle-making machine, the telegraph machine, the shoe-building machine, and the ditch-digging machine.

Large numbers of workers have been eliminated by conveyor-belt systems, automobile trucks, tractors, and trailers, loading devices, etc. Harness makers, carriage makers, cabinetmakers, wood carvers, and various other skilled workers have been outmoded.

(19) *Industry's failure to train employees for middle-aged usefulness.*—Generally speaking, the committee reports, employers have failed to train their employees to be useful in middle age. However, it finds that many large employers are making provision to retain their older workers. "Industry must do its own planning along these lines, but should be given the assistance and encouragement necessary to make it a real movement."

(20) *Discrimination practiced by municipal, State, and Federal civil services.*—Many cases of age discrimination by Federal, State, and municipal services were brought to the attention of the committee. In the attempt to remedy the situation as regards the municipal and State civil services, the chairman and vice chairman of the committee introduced into the State assembly and senate, respectively, a bill the enactment of which would correct some of the existing age-discrimination practices under the New York civil service laws.

(21) *Discrimination against persons on relief.*—A witness at the Buffalo hearings testified that persons on relief projects were subjected to discrimination and were unable to get back into private industry, but that such discrimination was not on the ground of age. The committee was unable to find supporting evidence for these contentions.

Referring to the many statements in current publications concerning the mental attitude of workers who find themselves on relief after faithful service to industry, the committee pointed out that when "one is denied employment while still in full possession of one's physical and mental faculties it must indeed be discouraging." Moreover, the average middle-aged man has family responsibilities—children to care for and send to school. Alarming indications of the effects of enforced poverty and relief on the younger generation were reported by the committee.

ACTIVITIES OF NATIONAL LABOR RELATIONS BOARD, 1936–37 [1]

THE National Labor Relations Act [2] defined the right of self-organization of employees in industry for the purpose of collective bargaining and established the National Labor Relations Board "to hear and determine cases in which it is charged that this legal right is abridged or denied, and to hold fair elections to ascertain who are the chosen representatives of employees." [3] From the passage of the act in July 1935 until April 12, 1937, when the Supreme Court issued decisions in five cases involving the act's validity and scope, the work of the Board was seriously handicapped. The effect of the Supreme Court's affirmation of decisions previously rendered by the Board was instantaneous. After the Court sustained the validity of the act and the Board's procedure under the act, the number of charges and petitions increased 1,000 percent.

Furthermore, the Supreme Court's decisions resulted in a decrease in the number of injunction suits against the Board and its officers. A total of 95 such suits had been filed in district courts since the Board began to administer the statute, but at the close of the year there remained only three injunction decrees outstanding.

During the fiscal year ending June 30, 1937, the Board disposed of 2,344 cases involving 467,807 workers. In 915 of these cases the charges or petitions were withdrawn because (*a*) it was decided that the charge or petition did not affect commerce sufficiently to warrant the Board's investigation; (*b*) the facts alleged by the party did not constitute an unfair labor practice within the meaning of the act; (*c*) a settlement of the dispute was reached directly by the parties; (*d*) the cases were transferred to other agencies of the Government or consolidated with other cases handled by the Board.

In many of the 1,429 cases settled, intervention by the Board took place before the disputes had advanced to the stage of strikes or threatened strikes. In 446 of the cases, strikes were actually in progress, and in 254 cases strikes had been threatened but were averted by the Board's intervention.

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[1] Data are from Second Annual Report of National Labor Relations Board, for fiscal year ended June 30, 1937. See Monthly Labor Review, March 1937 (p. 610), for summary of Board's First Annual Report.

[2] Public No. 198, 74th Cong., signed by the President on July 5, 1935.

[3] From statement of the President on approving National Labor Relations Act.

Nature of Settlements Reached Between Workers and Employers in National Labor Relations Board Cases, 1936–37

Nature of settlement	Number of cases	Number of workers involved
Recognition of workers' representatives	739	156,388
Reinstatement	335	22,046
Reinstatement and recognition	46	4,115
Reinstatement and improved working conditions	31	5,590
Consent election	194	127,213
Arbitration	5	5,020
Other [1]	25	5,526
Total	1,429	325,898

[1] This includes abolition of company unions, agreements to cease interference with employees' exercise of freedom or right of self-organization, posting of notices to this effect, placement of workers on preferential lists for employment, cash settlements of payment of back wages, increase in wages and improvement of working conditions, etc.

Representation Cases

The Board disposed of 582 cases, involving 217,921 workers, arising out of the filing of petitions requesting investigation and certification of representatives. In only 69 of these cases were formal hearings necessary. In almost 90 percent of the representation cases the petitioners withdrew their petitions after adjustments were made directly between the parties concerned, or when regional directors of the Board secured either recognition from the employers or the consent of all the parties involved to hold an election. In such consent elections the terms and conditions of election were usually the subject of agreement. The negotiations for consent election, in many instances, led to an admission that the petitioner actually represented the majority of the employees and to the recognition of such representatives for the purpose of collective bargaining.

In some of the cases in which formal hearings were held the petitions were withdrawn or dismissed, but in a majority of these cases certification of representatives was made either without an election (6) or after an election (37).

At the close of the year the Board had pending 692 representation cases. Most of these (580) had not yet come up for hearing. Some had been heard but were awaiting decision or order (52); the remaining 60 were awaiting compliance with orders or decisions issued.

Elections

From the beginning of the Board's existence until June 30, 1937, 265 elections were conducted by the agents of the Board, 48 pursuant to Board order and 217 by consent of the parties involved. Approximately 181,424 workers were eligible to vote in these elections and 164,207 actually participated in the polling. The fact that more than 90 percent of the eligible voters cast ballots in the elections indicates the keen interest shown by employees in the choice of the persons or

organizations to represent them in collective bargaining, and their approval of the democratic device of secret ballot to ascertain their choice.

The great majority of requests for investigation and certification of representatives were made by trade-unions or their members, rather than by employee-representation committees or company unions. Almost every industry was represented among the petitioners. Of the total valid votes cast, over 69 percent were in favor of the trade-unions whether or not such unions were the petitioners, and almost 31 percent were cast for the company union or against the trade-union.

Methods of conducting the elections were usually designed to meet the needs of individual cases. In consent elections an attempt was made to secure an agreement regarding all the details of the election, the parties determining the proper bargaining unit, the form of ballot, polling place, time of election, eligibility list, method of tallying, and other details. The Board, in those cases where elections were ordered by it, decided what the bargaining unit should be and usually directed that employees on the pay roll on a certain date should be eligible to vote.

In its decisions regarding the bargaining unit, the Board gave due consideration to the particular circumstances of each case, such as the history of labor relations in the plant and the industry, the mutual interest of employees, and, most important, the desires of the employees themselves. The Board met with some criticism from both the American Federation of Labor and the Committee for Industrial Organization in the determination of the bargaining unit.

The rivalry within the labor movement gave rise to another problem for the Board. In a number of instances a union filed a charge with the Board alleging that while it was organizing the employees in a plant the employer had invited in a rival labor organization. Such invitation, according to the charge, was accompanied by the employer's active aid. Since such an action by an employer is clearly illegal under the act, the Board held that the existence of a contract with the second union does not give the employer the right to discharge employees for refusal to join the union of the employer's choice. Invariably, according to the report, the Board's determinations in such cases were "resented by the union which had been the beneficiary of the employer's violation of the law."

The following statement indicates the results of elections held by the Board and the 21 regional offices. In some cases the ballots offered a choice between two organizations, oftentimes two trade-unions, and the votes, therefore, are here tabulated as for the petitioning trade-union, for the nonpetitioning trade-union, or for the company union or against the petitioning trade-union. The tabula-

tion indicates that a trade-union won in 214 election units and lost in 44. In two instances there were tie votes. Four elections involved votes for or against a company union, and in one the choice lay between two company unions.

Number of elections held	265
Number of employees eligible to vote	181, 424
Valid votes cast	164, 207
For petitioning trade-union	107, 227
For nonpetitioning trade-union	6, 261
For company union or against petitioning trade-union	50, 647
Percent of total votes cast:	
For company union or against trade-union	30. 8
For trade-unions, including petitioning and nonpetitioning trade-union	69. 1
Units won by trade-union	214
Units lost by trade-union	44

A COMPANY'S REPORT OF ITS OPERATIONS TO ITS EMPLOYEES

A SOMEWHAT unusual procedure was followed by the president of the Johns-Manville Corporation in issuing the annual report of the company for 1937 to the employees so that they might have statistical and other information regarding the operations of the company. In the foreword to the report [1] it is stated that although it has long been the custom to issue annual reports to stockholders whose investments have made possible the growth of a business, this report was issued to the jobholders, whose time and labor invested in the company had made it possible to manufacture, distribute, and sell the products of the company.

The report gives the number of employees, the salaries and wages paid during the year, the volume of business, plant expansion, and the percentage increase in wages over those paid in 1936, 1929, and at the low point of the depression in 1933. The total investment in buildings, machinery, tools, and other property is shown and an easily understandable balance sheet shows the assets and liabilities of the company, while in addition there is a table which gives a financial picture of the corporation for the 10-year period 1928–37. This table shows the percentage of earnings or loss to net sales for each of the years, the average profit for the period having been 6.5 percent. The total wage bill of $20,354,000 in 1937 was nearly 3 million dollars above the wages paid in the boom year of 1929, although the volume of sales, owing to the business recession in the latter part of the year, was somewhat lower. The company operates 12 plants and mines in

[1] The year 1937—A report to all members of the Johns-Manville Organization, by President Lewis H. Brown. New York, 22 East Fortieth Street, 1928.

the United States and Canada and one plant in Belgium. At seven of the plants collective-bargaining contracts were negotiated and signed with representatives elected by the employees. There was an average of 11,242 regular workers employed throughout the year and of this number 211 were members of the "quarter century club" having service records ranging from 25 to 48 years.

COLLECTIVE AGREEMENTS IN FRANCE, END OF 1937

COLLECTIVE agreements were first regulated in France under the law of March 25, 1919, but since the enactment of the law of June 24, 1936, which requires the Minister of Labor or his representative to appoint a joint committee for the purpose of concluding a collective agreement, on the demand of an employers' or workers' organization, the number and scope of such agreements has been greatly extended. The 1936 law, while not altering the earlier law fundamentally, relates specifically to agreements concluded between the most representative employers' and employees' organizations in a branch of industry or commerce for the entire country or for a specified district, and does not apply to agreements in which a single employer is concerned. Agreements thus concluded may be made compulsory by ministerial decree, after consultation with the National Economic Council, for all employers and workers in the industries and in the area covered by each agreement. A large number of agreements were concluded during the last half of 1936 and in 1937—in the majority of cases for a 1-year period—and were extended beyond that period in accordance with laws passed in July 1937 and January 1938. The total number of agreements for which a demand for extension had been addressed to the Minister of Labor was 934 at the end of 1937.

Collective agreements in France concluded between Sept. 7, 1936, and Dec. 15, 1937

Industry	Number of agreements	Industry	Number of agreements
All industries	4,187	Stone cutting and grinding	15
		Earthwork, stone construction	281
Fishing	4	Stone and brick	185
Forestry and agriculture	6	Warehousing	51
Farming and stock raising	45	Transportation	169
Mines	31	Commerce	625
Quarries	72	Amusements, etc	38
Food	387	Banks, insurance, offices	103
Chemicals	327	Judicial profession	5
Rubber, paper, pasteboard	149	Private education	3
Polygraphic industries	51	Religious organizations	1
Textiles	356	Societies of technical experts	2
Clothing	241	Arts and letters	11
Hair and feathers	7	Medical profession	54
Hides and skins	96	Personal service	54
Wood	218	Domestic service	1
Smelting	46	General public services	17
Metal manufacturing (ordinary metals)	404	Public industrial services	2
Metal manufacturing (fine metals)	11	Miscellaneous	117
Precious-stone cutting	2		

A recent report [1] by the Ministry of Labor shows the number of agreements in force in the middle of December 1937. The great increase in the number of agreements is shown by the fact that the number concluded from September 7, 1936, to March 15, 1937, as shown in a previous report,[2] was 2,364, whereas the number adopted up to December 15, 1937, was 4,187. The agreements in effect December 15, 1937, are shown in the following table, by industry.

[1] Bulletin du Ministère du Travail (Paris), October–December 1937, p. 512.
[2] See Monthly Labor Review, October 1937 (p. 861).

Housing Conditions

MINIMUM HOUSING STANDARDS FOR HEALTH

HOUSING must meet the fundamental physiological and psychological needs and protect tenants against contagion and accidents, as a minimum requirement, according to the preliminary report of the Committee on the Hygiene of Housing of the American Public Health Association.[1] As a result of study the committee laid down 30 basic principles of housing and outlined specific requirements with suggested methods of attainment for each. These standards are believed to be fundamental by the committee in order to promote physical, mental, and social health in low-cost as well as high-cost housing, in both rural and urban areas. The findings presented are preliminary only. Problems of management as well as construction and planning must be dealt with in order to attain the objectives sought. Under the new public housing program, it is believed by the authors of the report, given types of housing facilities may be approved for stated uses and occupancy, just as elevators are licensed for given loads.

Physiological Needs

The recommendations dealing with physiological needs cover temperature, ventilation, light, noise control, and recreation space for adults and children. Attention is given to the maintenance of a thermal environment to avoid undue heat loss from the human body and at the same time make use of air temperature, mean radiant temperature, relative humidity, and air movement, in order that occupants of dwellings may enjoy bodily comfort. The report enumerates the kinds of heating equipment desirable for given types of large or small buildings and discusses the importance of insulation and heating installations capable of producing certain minimum temperatures in the coldest winter weather. It is noted that sufficient air change to maintain an atmosphere of reasonable chemical purity is obtainable in the ordinary home by air leakage in winter and open windows in summer.

In constructing dwellings the principles of securing adequate daylight illumination and avoiding undue daylight glare, while at the same time admitting direct sunlight, must also be considered. In

[1] American Journal of Public Health (New York City), March 1938, pp. 351–372: Basic Principles of Healthful Housing.

this connection the report makes specific recommendations on foot-candles of artificial light, degree of sky angle at the lowest window sill, and openings to the outer air in each room, and establishes the principle that direct sunlight should enter all dwellings at some places and hours regardless of the season.

Because excessive noise is harmful and means of reducing it are much neglected in the United States, the standards accepted in Europe are recommended for study in relation to conditions here. Pointing out that there should be less noise in rooms for sleep and study than in those for other purposes, the committee establishes in each case an upper limit of decibels allowable.

To promote health, adequate opportunities for physical exercise and recreation for adults and children are regarded as essential. These ends are primarily psychological in nature but are attained by physiological processes and involve the allotment of sufficient play space and park area.

Psychological Needs

Primary psychological needs are listed as adequate privacy for the individual, opportunity for normal family and community life, facilities for performing household tasks without undue strain, maintenance of both dwelling and personal cleanliness, the possibilities for reasonable esthetic satisfaction, and conformity with prevailing social standards of the locality.

The committee regards the privacy of the individual in the home as of equal importance with the need for the family to secure privacy in its own dwelling from the noise and tension of the streets. Standards of room occupancy and lay-out of suites are therefore laid down. Planning, it is held, is not sufficient and must be accompanied by careful tenant selection, adjustment to changing family needs, limitation of number of boarders, control of subleasing, and adjustment of rent schedules to family income and size.

Living accommodations should also be adapted to the social requirements of the family, allowing a place for young persons to entertain their friends without interfering with other family activities. To this end a minimum space requirement per member of the household is desirable.

Homes should be located so that they are convenient to the community institutions used by the family and near the places of work. In housing developments an effort should be made to make community life possible and at the same time "avoid freezing the lines of social cleavage that may so easily form around the project dwellers as a privileged group in the community."

The home is a workplace as well as a dwelling and the committee believes the ordinary household tasks should be simplified as much

as possible. Sound industrial hygiene requires that there be good facilities for storage, cooking, laundering, refuse disposal, and cleansing. Good arrangement and modern equipment are recommended to meet these needs. Similarly it is important that good taste be used for the esthetic satisfaction of tenants.

Requirements that would bring dwellings into line with prevailing social standards of the local community are obviously purely relative, the report states. Where a home is noticeably inferior to those of friends and neighbors, emotional reactions of children in particular may be incompatible with mental health. While the public has become aroused by the dangers of communicable disease, the importance of emotional hazards is as yet not adequately recognized. While no fixed requirements are suggested the committee urges that social standards of a given area should be protected by proper zoning ordinances.

Protection Against Contagion and Accidents

A safe water supply, adequate provision of toilet facilities, protection against sewage contamination, location of housing in sanitary surroundings, exclusion of vermin, protection of food against deterioration, and sufficient space to prevent contact infection, are each treated as they relate to protection against contagion. These problems lend themselves to solution through the installation of good plumbing and other equipment, but there are additional considerations; for example, in locating a housing development the existing water supply should be taken into account.

Home accidents bulk so large in the total that protection against mishaps within dwellings is regarded as of major importance. The measures advocated by the committee to minimize the possibility of danger are safe construction; control of fire hazards; adequate facilities for escape in case of fire; protection against electrical shocks and burns, gas poisoning, falls, and other mechanical injuries; and neighborhood safeguards against automobile traffic. In all cases methods of attainment are suggested, whether by installation of protective equipment or by regulation.

Industrial Accidents

INJURY EXPERIENCE IN THE IRON AND STEEL INDUSTRY, 1935 AND 1936

THE injury frequency rate for the iron and steel industry rose from 14.89 in 1935 to 15.77 in 1936, and the severity rate declined from 2.15 in 1935 to 2.10 in 1936.[1] These conclusions are based on reports received by the Bureau of Labor Statistics from 1,756 departments of identical firms [2] for 1935 and 1936. They reveal an increase in man-hours of 238,000,000, or 30.5 percent; an increase in injuries of 4,438, or 38.2 percent; and an increase in days lost of over 464,000 or 27.7 percent.

TABLE 1.—*Summary of Injury Experience for Identical Departments in the Iron and Steel Industry, 1935 and 1936*

Item	1935	1936	Percent of change
Total man-hours of exposure (thousands)	780,349	1,018,563	+30.5
Total number of lost-time injuries	11,622	16,060	+38.2
Total days of disability	1,678,295	2,142,392	+27.7
Injury frequency rate	14.89	15.77	+5.9
Injury severity rate	2.15	2.10	−2.3

As indicated above, the increase in man-hours of exposure resulted in a proportionately greater increase in the number of disabling injuries, but with a shift from injuries of a permanent nature to those of a temporary nature. Further evidence of this trend is given in table 5, which discloses that for the disability distribution per 1,000 injuries, death and permanent total injuries increased from 10 in 1935 to 11 for 1936, permanent partial injuries decreased from 71 to 60, and temporary injuries increased from 919 to 929. Combina-

[1] The injury frequency rate is the average number of disabling injuries for each million man-hours worked. The injury severity rate is the average number of days lost for each thousand man-hours worked. The term "injury" connotes a disability which involves loss of time beyond the day or shift on which the injury occurred, or a permanent impairment of some member of the body, even if not accompanied by lost time. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1937.

[2] The policy of restricting statistics to data furnished by identical firms for 2 successive years, although tending to narrow the sample, results in a compensating gain of stricter comparability. Shifts in the sample for each 2 successive years give somewhat different rates for any 1 year, depending on whether the comparison is with a preceding year or a succeeding year. Generally, these differences are slight. For 1935, however, the frequency rate of 17.14 in the 1934–35 comparison varies considerably from that of 14.89 in the 1935–36 comparison. A check reveals that this difference is due to the inclusion in the 1934–35 study of a group of departments with the high frequency rate of 32.07, which group was replaced in the 1935–36 comparison by another with a frequency rate of only 13.68.

tion of deaths and all permanent injuries shows that all injuries of a permanent nature decreased from 81 in 1935 to 71 for 1936. The shift toward injuries of a less serious nature, as a group, was matched by a shift toward less serious injuries within the group. As expressed by the average number of days lost per disability, the permanent partial injuries decreased from 843 days per injury in 1935 to 801 days for 1936, and the temporary injuries decreased from 24 to 21 days per injury.

To permit more adequate comparison, the departments in the iron and steel industry have been divided into four classes: Melting and rolling, finishing, service and maintenance, and not otherwise classified. Of the four department classes the departments engaged in finishing had the highest frequency rate in both years—25.84 in 1935 and 27.35 in 1936. The melting and rolling departments were second in both years with 11.39 in 1935 and 11.86 in 1936, the departments not otherwise classified were third with 11.36 and 11.07, and the service and maintenance departments were fourth with 8.46 and 8.36.

The four department classes also maintained their same severity ranking in 1936 as compared with 1935. The service and maintenance departments were first with 2.85 in 1935 and 2.55 in 1936, the finishing departments second with 2.39 and 2.26, the melting and rolling departments third with 2.21 and 2.14, and the departments not otherwise classified fourth with 1.07 and 1.43. The finishing departments experienced the largest increase in frequency rate, 5.8 percent, and the departments not otherwise classified the largest decrease, 2.6 percent. Three of the four department classes had decreases in the severity rate, the largest of which was found in the service and maintenance departments with a decrease of 10.5 percent. On the other hand, the departments not otherwise classified had an increase in the severity rate of fully a third. The summary for all departments combined shows an increase in man-hours, an increase in the frequency rate, and a decrease in the severity rate. The melting and rolling departments and the finishing departments closely followed this general trend, while the service and maintenance departments experienced a slight decrease in the frequency rate, and the departments not otherwise classified experienced a sharp increase in the severity rate.

TABLE 2.—*Injuries and Injury Rates for 1,756 Identical Departments in the Iron and Steel Industry, by Extent of Disability, 1935 and 1936*

Department	1935									
	Number of departments	Man-hours worked (thousands)	Number of injuries resulting in—				Total number of injuries	Total time lost (days)	Frequency rate	Severity rate
			Death	Permanent total disability	Permanent partial disability	Temporary total disability				
All departments [1]	1,756	780,349	119	3	824	10,676	11,622	1,678,295	14.89	2.15
Melting and rolling	510	329,950	55	0	340	3,363	3,758	728,528	11.39	2.21
Bessemer converters	18	5,852	1	0	7	44	52	12,058	8.89	2.06
Blast furnaces	64	26,187	11	0	22	215	248	97,099	9.47	3.71
Electric furnaces	35	3,721	0	0	3	168	171	3,504	45.95	.94
Open-hearth furnaces	71	37,561	18	0	37	321	376	155,710	10.01	4.15
Bar mills	14	3,601	0	0	5	38	43	8,919	11.94	2.48
Cold rolling	19	8,015	1	0	11	74	86	17,559	10.73	2.19
Heavy-rolling mills	53	43,873	4	0	37	243	284	66,069	6.47	1.51
Hot mills	21	23,420	1	0	25	304	330	37,757	14.09	1.61
Light-rolling mills [2]	62	32,763	5	0	42	503	550	83,652	16.79	2.55
Plate mills	26	11,149	1	0	16	.87	104	14,582	9.33	1.31
Rod mills	26	6,130	0	0	4	31	35	6,008	5.71	.98
Sheet mills	40	56,888	7	0	43	659	709	97,858	12.46	1.72
Strip mills	16	20,019	3	0	41	250	294	59,878	14.69	2.99
Tube mills	35	50,041	3	0	46	404	453	67,308	9.05	1.35
Miscellaneous	10	731	0	0	1	22	23	567	31.48	.78
Crucible furnaces	3	23	0	0	0	2	2	7	-------	------
Puddling mills	7	707	0	0	1	20	21	560	-------	------
Finishing	727	211,059	26	1	298	5,128	5,453	503,996	25.84	2.39
Axle works	7	1,682	0	0	1	88	89	2,981	52.92	1.77
Bolts and nuts	37	12,166	2	0	18	228	248	28,842	20.38	2.37
Car wheels	29	3,370	1	0	5	111	117	15,769	34.72	4.68
Cold drawing	18	7,006	1	0	4	104	109	9,416	15.56	1.34
Fabricating shops	106	23,922	2	1	33	581	617	62,710	25.79	2.62
Forge shops	171	34,773	8	0	52	1,109	1,169	103,705	33.62	2.98
Foundries	169	52,620	6	0	79	1,713	1,798	136,447	34.17	2.59
Galvanizing and tinning	37	22,856	1	0	11	139	151	20,684	6.61	.90
Nails and staples	18	2,516	0	0	1	18	19	712	7.55	.28
Stamping	52	16,564	1	0	51	512	564	49,949	34.05	3.02
Wire drawing	45	24,599	3	0	33	266	302	58,133	12.28	2.36
Wire springs	19	6,542	1	0	5	238	244	9,807	37.30	1.50
Woven-wire fence	19	2,443	0	0	5	21	26	4,841	10.64	1.98
Service and maintenance	293	106,255	32	1	101	765	899	302,941	8.46	2.85
Electrical	59	15,424	6	0	12	62	80	49,450	5.19	3.21
Mechanical	135	70,976	21	0	73	607	701	198,297	9.88	2.79
Ore docks and yards	3	348	0	0	0	1	1	10	2.87	.03
Power houses	24	4,465	1	0	0	8	9	6,479	2.02	1.45
Yards and transportation	72	15,042	4	1	16	87	108	48,705	7.18	3.24
Not otherwise classified [3]	226	133,084	6	1	85	1,420	1,512	142,830	11.36	1.07
Coke ovens	28	14,615	3	0	7	46	56	32,620	3.83	2.23
Erecting	3	190	1	0	4	36	41	11,975	215.23	62.86

[1] Except coke-oven and erection departments.
[2] Called unclassified rolling mills until 1934.
[3] Included in miscellaneous departments until 1936.

TABLE 2.—*Injuries and Injury Rates for 1,756 Identical Departments in the Iron and Steel Industry, by Extent of Disability, 1935 and 1936*—Continued

Department	1936									
	Number of departments	Man-hours worked (thousands)	Number of injuries resulting in—				Total number of injuries	Total time lost (days)	Frequency rate	Severity rate
			Death	Permanent total disability	Permanent partial disability	Temporary total disability				
All departments [1]	1,756	1,018,563	170	5	964	14,921	16,060	2,142,392	15.77	2.10
Melting and rolling	510	398,945	74	3	345	4,308	4,730	851,842	11.86	2.14
Bessemer converters	18	6,591	3	0	6	41	50	24,800	7.59	3.76
Blast furnaces	64	35,517	15	2	30	396	443	147,344	12.47	4.15
Electric furnaces	35	5,751	3	0	5	339	347	25,891	60.33	4.50
Open-hearth furnaces	71	51,676	17	0	48	446	511	155,924	9.89	3.02
Bar mills	14	5,017	1	0	6	41	48	13,193	9.57	2.63
Cold rolling	19	9,233	0	0	4	174	178	7,402	19.28	.80
Heavy-rolling mills	53	58,052	11	1	32	357	401	108,891	6.91	1.88
Hot mills	21	26,113	6	0	7	323	336	46,458	12.87	1.78
Light-rolling mills [2]	62	43,198	7	0	49	628	684	104,054	15.83	2.41
Plate mills	26	18,016	2	0	20	111	133	33,030	7.38	1.83
Rod mills	26	7,066	1	0	8	74	83	11,175	11.75	1.58
Sheet mills	40	57,110	2	0	38	606	646	54,350	11.31	.95
Strip mills	16	17,922	0	0	31	175	206	24,988	11.49	1.39
Tube mills	35	56,458	6	0	59	572	637	91,925	11.28	1.63
Miscellaneous	10	1,225	0	0	2	25	27	2,417	22.04	1.97
Crucible furnaces	3	48	0	0	0	1	1	10	-------	-------
Puddling mills	7	1,177	0	0	2	24	26	2,407	-------	-------
Finishing	727	297,657	35	2	399	7,706	8,142	674,100	27.35	2.26
Axle works	7	2,433	0	0	6	103	109	7,282	44.79	2.99
Bolts and nuts	37	16,622	0	0	26	345	371	19,802	22.32	1.19
Car wheels	29	3,986	1	0	1	148	150	9,630	37.64	2.42
Cold drawing	18	4,355	0	0	1	165	166	4,941	38.11	1.13
Fabricating shops	106	35,978	4	0	65	983	1,052	117,734	29.24	3.27
Forge shops	171	53,379	7	0	84	1,617	1,708	117,667	32.00	2.20
Foundries	169	77,821	12	1	79	2,802	2,894	181,245	37.19	2.33
Galvanizing and tinning	37	33,774	3	0	24	255	282	48,134	8.35	1.43
Nails and staples	18	3,187	0	0	5	21	26	2,186	8.16	.69
Stamping	52	18,927	6	0	53	691	750	88,032	39.63	4.65
Wire drawing	45	36,530	2	1	42	323	368	65,739	10.07	1.80
Wire springs	19	7,586	0	0	11	233	244	10,452	32.17	1.38
Woven-wire fence	19	3,079	0	0	2	20	22	1,256	7.14	.41
Service and maintenance	293	138,353	39	0	115	1,002	1,156	353,092	8.36	2.55
Electrical	59	19,127	7	0	5	89	101	49,955	5.28	2.61
Mechanical	135	90,926	21	0	87	763	871	213,821	9.58	2.35
Ore docks and yards	3	492	1	0	1	2	4	9,110	8.14	18.53
Power houses	24	5,393	1	0	1	14	16	6,962	2.97	1.29
Yards and transportation	72	22,415	9	0	21	134	164	7,324	7.32	3.27
Not otherwise classified [3]	226	183,608	22	0	105	1,905	2,032	263,358	11.07	1.43
Coke ovens	28	19,447	9	0	7	74	90	62,361	4.63	3.21
Erecting	3	147	1	0	1	27	29	7,010	197.56	47.76

[1] Except coke-oven and erection departments.
[2] Called unclassified rolling mills until 1934.
[3] Included in miscellaneous departments until 1936.

Melting and Rolling

The changes in frequency rates of departments in the melting and rolling class varied extensively for the 2 years studied, as contrasted with the increases in the frequency rates of most of the departments in the finishing class and in the service and maintenance class. Nine of the 15 department groups had decreases in their frequency rates, and 10 had increases in their severity rates. Nevertheless, the melting

and rolling class had a net increase in its frequency rate (11.39 to 11.86) and a net decrease in its severity rate (2.21 to 2.14).

From 1935 to 1936 the man-hours of the 510 departments reporting in this class rose from 330,000,000 to 399,000,000, or 20.9 percent, with an increase in every department group except strip mills, for which man-hours decreased by about 10 percent. Disabling injuries for the class as a whole increased from 3,758 to 4,730, and the days lost from 729,000 to 852,000, or 25.9 percent and 16.9 percent respectively. Two of the department groups with outstandingly large percentage increases in frequency rates are electric furnaces and cold rolling, the rate for the former rising from 45.95 to 60.33 and for the latter from 10.73 to 19.28. The severity rate of electric furnaces jumped from next to the lowest in its class to the highest, or from 0.94 to 4.50, while cold rolling—which ranked among the highest in 1935— dropped to the lowest in 1936, or from 2.19 to 0.80. Rod mills experienced sharp increases in both frequency (5.71 to 11.75) and severity (0.98 to 1.58), whereas strip mills had declines in both frequency (14.69 to 11.49) and severity (2.99 to 1.39).

Finishing

The experience of the finishing class, as computed from the reports from 727 departments, shows an increase from 211,000,000 man-hours in 1935 to 298,000,000 for 1936, an increase of 41 percent. Disabling injuries increased during this period from 5,453 to 8,142, or 49.3 percent, but days lost increased from 504,000 to 674,000, or 33.8 percent, resulting in an increase in the frequency rate from 25.84 to 27.35 and a decrease in the severity rate from 2.39 to 2.26.

Eight of the thirteen finishing departments experienced increases in their frequency rates. The cold drawing, fabricating shops, galvanizing and tinning, stamping, foundries, and car-wheels departments had sizable increases, while the bolts and nuts, and nails and staples departments experienced only slight increases. The axle works, wire springs, woven-wire fence, and wire drawings departments, on the other hand, had sizable reductions in their frequency rates, and the forge-shops rate declined slightly from the 1935 level.

Among those having the sharpest variation in experience, the cold drawing department is outstanding. It was the only department group in this class to suffer a loss in man-hours worked, dropping, from 7,000,000 to 4,355,000. It also had the largest net increase in frequency rate, rising from 15.56 to 38.11. The severity rate, however, declined from 1.34 to 1.13. The 1936 trend toward less severe injuries, heretofore mentioned, is prominently exemplified by the experience of the cold-drawing group. The number of deaths and permanent total injuries per 1,000 injuries decreased from 9 to 0, and

of permanent partial injuries per 1,000 injuries from 37 to 6, giving a total decrease of all permanent injuries from 46 to 6.

Whereas 8 of the 13 department groups had increasing frequency rates, only 5 had increases in their severity rates. The axle works, fabricating shops, galvanizing and tinning, nails and staples, and stamping departments experienced increases, and the bolts and nuts, car wheels, cold drawing, forge shops, foundries, wire springs, woven-wire fence, and wire drawing departments had decreases. The nails and staples departments experienced the sharpest rise in severity rate (0.28 to 0.69), but still had the lowest severity rate in their class for 1935 and the second lowest for 1936. The three most noteworthy decreases occurred in the bolts and nuts, car wheels, and woven-wire fence department groups, declining from 2.37 to 1.19, 4.68 to 2.42, and 1.98 to 0.41, respectively.

Service and Maintenance

For the 293 departments included in the service and maintenance class, man-hours increased from 106,000,000 to 138,000,000, injuries increased from 899 to 1,156, and days lost increased from 303,000 to 353,000, or increases of 30.2, 28.6, and 16.6 percent, respectively. Consequently the frequency rate for the class as a whole declined slightly from 8.46 to 8.36, and the severity rate dropped from 2.85 to 2.55. Since 1934, the service and maintenance class has consistently had the lowest frequency rate and the highest severity rate in the four classes of departments. The mechanical departments group was the only one to have a decrease in the frequency rate, dropping from 9.88 to 9.58. Ore docks and yards presented the largest increase in both frequency and severity rates of all the department groups in the entire industry. The frequency rate increased from 2.87 to 8.14 and the severity rate from 0.03 to 18.53, primarily because of a fatality and a permanent partial disability.

Because coke ovens and erecting departments are not considered as an integral part of the iron and steel industry as such, although operated by some iron and steel concerns, the figures for these two groups are shown separately and are not included in the general industry data. Attention is called to the extremely high frequency and severity rates of the erecting group.

TABLE 3.—*Comparison, by Major Departments of the Iron and Steel Industry, of Changes in Exposure, Frequency, and Severity Rates, 1935 and 1936* [1]

Department	Man-hours worked		Frequency rate		Severity rate	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
Blast furnaces	X		X		X	
Fabricating shops	X		X		X	
Forge shops	X			X		X
Foundries	X		X			X
Galvanizing and tinning	X		X		X	
Heavy-rolling mills	X		X		X	
Hot mills	X			X	X	
Light-rolling mills	X			X		X
Mechanical	X			X		X
Open-hearth furnaces	X			X		X
Sheet mills	X			X		X
Strip mills		X		X		X
Tube mills	X		X		X	
Wire drawing	X			X		X
Yards and transportation	X		X		X	
Not otherwise classified	X			X	X	

[1] Departments with 20,000,000 or more man-hours in 1935 or 1936.

Effects of Changes in Exposure

An analysis of the experience of department groups with 20,000,000 or more man-hours of exposure in either 1935 or 1936 shows that an increase in exposure may be accompanied by either an increase or decrease in the incidence of injuries. Fifteen of the sixteen major department groups experienced an increased exposure. Of these, seven had an increase in frequency rate and eight a decrease in frequency rate. Of the seven department groups having an increase in man-hours and frequency, all but one had increases in the severity rate. Of the eight which experienced increases in man-hours and decreases in their frequency rates, all but two had decreases in their severity rates. Strip mills, the only group having a decrease in man-hours worked, experienced decreases in both the frequency and the severity rates. The effects of the increased exposure on the frequency and severity rates of the 15 department groups are more clearly seen by the following tabulation:

	Department groups
Increased frequency and increased severity	6
Increased frequency and decreased severity	1
Decreased frequency and increased severity	2
Decreased frequency and decreased severity	6

It appears, therefore, that an increase in exposure had exactly opposite effects in 12 of the 15 department groups: in 6 the increased exposure resulted in increases in both the frequency and severity rates, and in another 6, the increased exposure resulted in decreases in both the frequency and severity rates.

Rank of Department Groups

In table 4 are shown the relative standing of the department groups according to frequency rate and severity rate, rank 1 being allotted to the group with the lowest rate, rank 2 to the second lowest, etc. Table 4 should be used in conjunction with table 2, as a shift in rank may or may not be of importance, because the difference in rate causing a shift from one rank to another in the following year may be large or small; also a department group having the same rank for both years in frequency and severity rates may have experienced a decided rise or fall in each of these rates. For example, the hot-mills group, which ranked twenty-first in frequency and fourteenth in severity in both 1935 and 1936, had a decrease in its frequency rate from 14.09 to 12.87, and an increase in its severity rate from 1.61 to 1.78.

TABLE 4.—*Rank, According to Frequency and Severity Rates, of Departments in the Iron and Steel Industry, 1935 and 1936* [1]

Department	Rank according to frequency rate		Rank according to severity rate	
	1935	1936	1935	1936
Melting and rolling				
Bessemer converters	9	7	18	30
Blast furnaces	12	20	32	31
Electric furnaces	33	34	5	32
Open-hearth furnaces	14	13	33	27
Bar mills	18	11	22	25
Cold rolling	16	23	19	3
Heavy-rolling mills	5	3	13	17
Hot mills	21	21	14	14
Light-rolling mills	24	22	23	22
Plate mills	11	6	8	16
Rod mills	4	19	6	12
Sheet mills	20	17	15	4
Strip mills	22	18	28	9
Tube mills	10	16	10	13
Miscellaneous	27	24	3	18
Finishing				
Axle works	34	33	16	26
Bolts and nuts	25	25	21	6
Car wheels	31	30	34	23
Cold drawing	23	31	9	5
Fabricating shops	26	26	25	29
Forge shops	28	27	27	19
Foundries	30	29	24	20
Galvanizing and tinning	6	10	4	10
Nails and staples	8	9	2	2
Stamping	29	32	29	33
Wire drawing	19	14	20	15
Wire springs	32	28	12	8
Woven-wire fence	15	4	17	1
Service and maintenance				
Electrical	3	2	30	24
Mechanical	13	12	26	21
Ore docks and yards	2	8	1	34
Power houses	1	1	11	7
Yards and transportation	7	5	31	28
Not otherwise classified	17	15	7	11

[1] The lowest rate is ranked first, the second lowest second, etc.

The ranking of department groups, however, aside from indicating the relative experiences of the departments studied, indicates to some degree the stability of certain of these groups as to the relative injury hazards as compared with hazards in other department groups. The frequency ranking indicates the relative number of injuries, and the severity ranking the nature of the injuries. Thus a low frequency and severity ranking shows a low degree of hazard with relatively few

injuries and those of a minor nature. The department groups achieving this favorable result in both years were galvanizing and tinning, nails and staples, and power houses. Rod mills and ore docks and yards fall into this group in 1935, and woven-wire fence departments in 1936. On the other hand, the light rolling mills, car wheels, fabricating shops, forge shops, foundries, and stamping department groups had a proportionately large number of injuries which, on the average, were very severe in character as indicated by the high frequency and severity rankings. Cold-drawing departments had a high frequency and low severity ranking in both years, and the bolts and nuts group in 1936. The electrical and yards and transportations groups had low frequency and high severity rankings in both years, as had ore docks and yards in 1936.

Disability Distribution per 1,000 Injuries

The frequency and severity rates presented in table 2 were based on man-hours of exposure. The frequency rate indicated the average number of injuries per million man-hours worked. The severity rate indicated the average number of days lost per thousand man-hours worked. While both rates are essential to an analysis of the incidence of disabling injuries and the time loss involved, they do not reflect the severity of the injuries themselves. Severity rates measure the time loss on the basis of exposure, but do not indicate the average time loss per injury, nor the actual distribution of injuries in terms of type of disability.

To complete the picture of industrial injuries it is important to know whether a given time loss was incurred by a large number of minor injuries resulting in temporary total disabilities, or by a small number of fatalities and permanent disabilities of a serious nature. Furthermore, given a large enough man-hour exposure, even a relatively high number of fatalities and serious permanent disabilities will result in a low severity rate. To illustrate, in 1936 the electric furnaces departments, with a total of 347 injuries, experienced 3 fatalities, 5 permanent partial disabilities, and 339 temporary total disabilities, and had a severity rate of 4.50. The service and maintenance group of departments, on the other hand, with a total of 1,156 injuries, experienced 39 fatalities, 115 permanent partial disabilities, and 1,002 temporary total disabilities, and had a severity rate of 2.55. As against a time loss of 25,891 days for the electric furnaces departments, that for the service and maintenance group of departments was 353,092. Nevertheless, because the man-hour exposure for the electric-service group was 5,751,000 as against 138,353,000 for the service-and-maintenance group of departments, the former experienced a severity rate of 4.50, while the latter experienced a severity rate of 2.55. What the

severity rates failed to reveal is the fact that the service and maintenance group of departments, with a severity rate of 2.55, experienced 1 fatality or permanent partial disability in every 8 injuries, while the electric-furnace departments, with a severity rate of 4.50, experienced 1 fatality or permanent partial disability in every 43 injuries. Clearly, then, severity rates do not reflect the seriousness of the injuries themselves.

In addition, severity rates do not measure the shift in the seriousness of industrial injuries. They do not indicate whether injuries resulting in fatalities and permanent disabilities are increasing or decreasing in relation to the total number of injuries. They do not show from year to year whether fatalities and permanent disabilities are greater or smaller in proportion to the total number of injuries.

Table 5 was constructed to develop the desired data. For each department the table indicates per 1,000 injuries the relative number of fatalities and permanent total disabilities, permanent partial disabilities, and temporary total disabilities, as well as the average time loss per disability. Where the total number of injuries is so small that one or two fatalities, or a small number of permanent partial disabilities would loom unusually large when expressed per 1,000 injuries, the computed number is not given.

TABLE 5.—*Disability Distribution per 1,000 Injuries and Average Days Lost, by Departments, 1935 and 1936*

Department	Death and permanent total disability [1]		Permanent partial disability				Temporary total disability			
	Number per 1,000 injuries		Number per 1,000 injuries		Days lost per disability		Number per 1,000 injuries		Days lost per disability	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
All departments	10	11	71	60	843	801	919	929	24	21
Melting and rolling	15	16	90	73	895	810	895	911	28	26
Bessemer converters	19	60	135	120	600	850	846	820	42	41
Blast furnaces	44	38	89	68	1,048	1,163	867	894	37	26
Electric furnaces	0	9	18	14	300	750	982	977	16	12
Open-hearth furnaces	48	33	98	94	981	774	854	873	36	38
Bar mills	0	[2]	116	125	1,520	1,000	884	854	35	29
Cold rolling	[2]	0	128	22	841	825	860	978	31	24
Heavy-rolling mills	14	30	130	80	897	752	856	890	36	36
Hot mills	3	18	76	21	1,012	536	921	961	21	21
Light-rolling mills	9	10	76	72	982	984	915	918	25	22
Plate mills	10	15	154	150	350	865	836	835	34	34
Rod mills	0	[2]	114	96	1,200	450	886	892	39	21
Sheet mills	10	3	61	59	922	749	929	938	25	23
Strip mills	10	0	140	150	850	627	850	850	28	32
Tube mills	7	9	101	93	829	719	892	898	28	24
Miscellaneous	0	0	[2]	[2]	[2]	[2]	957	926	12	13
Finishing	5	5	55	49	848	797	940	946	17	17
Axle works	0	0	[2]	55	[2]	[2]	989	945	13	16
Bolts and nuts	8	0	73	70	692	579	919	930	19	14
Car wheels	8	7	43	[2]	[2]	[2]	949	986	19	22
Cold drawing	9	0	37	[2]	[2]	[2]	954	994	17	15

[1] Each death or permanent total disability is charged with a time loss of 6,000 days.
[2] Computations not given because of small number of total injuries.

TABLE 5.—*Disability Distribution per 1,000 Injuries and Average Days Lost, by Departments, 1935 and 1936*—Continued

Department	Death and permanent total disability		Permanent partial disability				Temporary total disability			
	Number per 1,000 injuries		Number per 1,000 injuries		Days lost per disability		Number per 1,000 injuries		Days lost per disability	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
Finishing—Continued.										
Fabricating shops	5	4	53	62	997	1,086	942	934	20	24
Forge shops	7	4	44	49	763	621	949	947	14	15
Foundries	3	5	44	27	900	737	953	968	17	16
Galvanizing and tinning	7	11	73	85	959	994	920	904	30	25
Nails and staples	0	0	(1)	(1)	300	360	947	808	23	18
Stamping	2	8	90	74	699	770	908	921	16	16
Wire drawing	10	8	109	114	979	900	881	878	29	31
Wire springs	4	0	21	45	450	773	975	955	7	8
Woven-wire fence	0	0	(1)	(1)	(1)	(1)	808	909	21	18
Service and maintenance	37	34	112	99	777	750	851	867	35	33
Electrical	75	69	150	50	921	900	775	881	39	39
Mechanical	30	24	104	100	723	743	866	876	32	30
Ore docks and yards	0	(1)	0	(1)	0	(1)	(1)	(1)	(1)	(1)
Power houses	(1)	(1)	0	(1)	0	(1)	(1)	(1)	(1)	(1)
Yards and transportation	46	55	148	128	912	660	806	817	47	40
Not otherwise classified	5	11	56	52	697	840	939	937	29	23

[1] Computations not given because of small number of total injuries.

While for all departments the number of deaths and permanent total disabilities [3] increased from 10 per 1,000 injuries in 1935 to 11 in 1936, permanent partial—i. e., partially crippling—disabilities decreased from 71 to 60. On the average, injuries of this type were less severe in 1936, as the average number of days lost per disability decreased from 843 in 1935 to 801 in 1936. Temporary total disabilities increased slightly, from 919 per 1,000 injuries in 1935 to 929 in 1936, but this increase was accompanied by a drop in the average number of days lost per disability, from 24 to 21. For the industry as a whole, then, there occurred in 1936 as compared with 1935, 1 more death and permanent total disability per 1,000 injuries, 11 fewer permanent partial disabilities, and 10 more temporary total disabilities.

The melting and rolling departments followed the general trend of the entire industry. An increase of 1 death and permanent total disability per 1,000 injuries raised the 1935 figure of 15 to 16 for 1936. Permanent partial disabilities decreased from 90 in 1935 to 73 in 1936. The average number of days lost per permanent partial disability also decreased, from 895 in 1935 to 810 in 1936, indicating that the injuries, on the average, were of a less severe nature in 1936. Temporary total disabilities rose from 895 per 1,000 injuries in 1935 to 911 in 1936, with the average number of days lost per disability decreased from

[3] Combined because the number of permanent total disabilities is very small, and because both types of injuries are charged with a time loss of 6,000 days per case.

28 in 1935 to 26 in 1936. Various department groups in the melting and rolling class experienced wide variations in fatalities and permanent total disabilities per 1,000 injuries. Deaths and permanent total disabilities rose sharply in the bessemer converters, heavy-rolling mills, and hot mills, increasing respectively from 19 in 1935 to 60 in 1936, from 14 to 30, and from 3 to 18. Blast furnaces, open-hearth furnaces, sheet mills, and strip mills showed decreases in the relative proportion of the same type of injuries. The decreases were from 44 in 1935 to 38 in 1936, 48 to 33, 10 to 3, and 10 to 0, respectively.

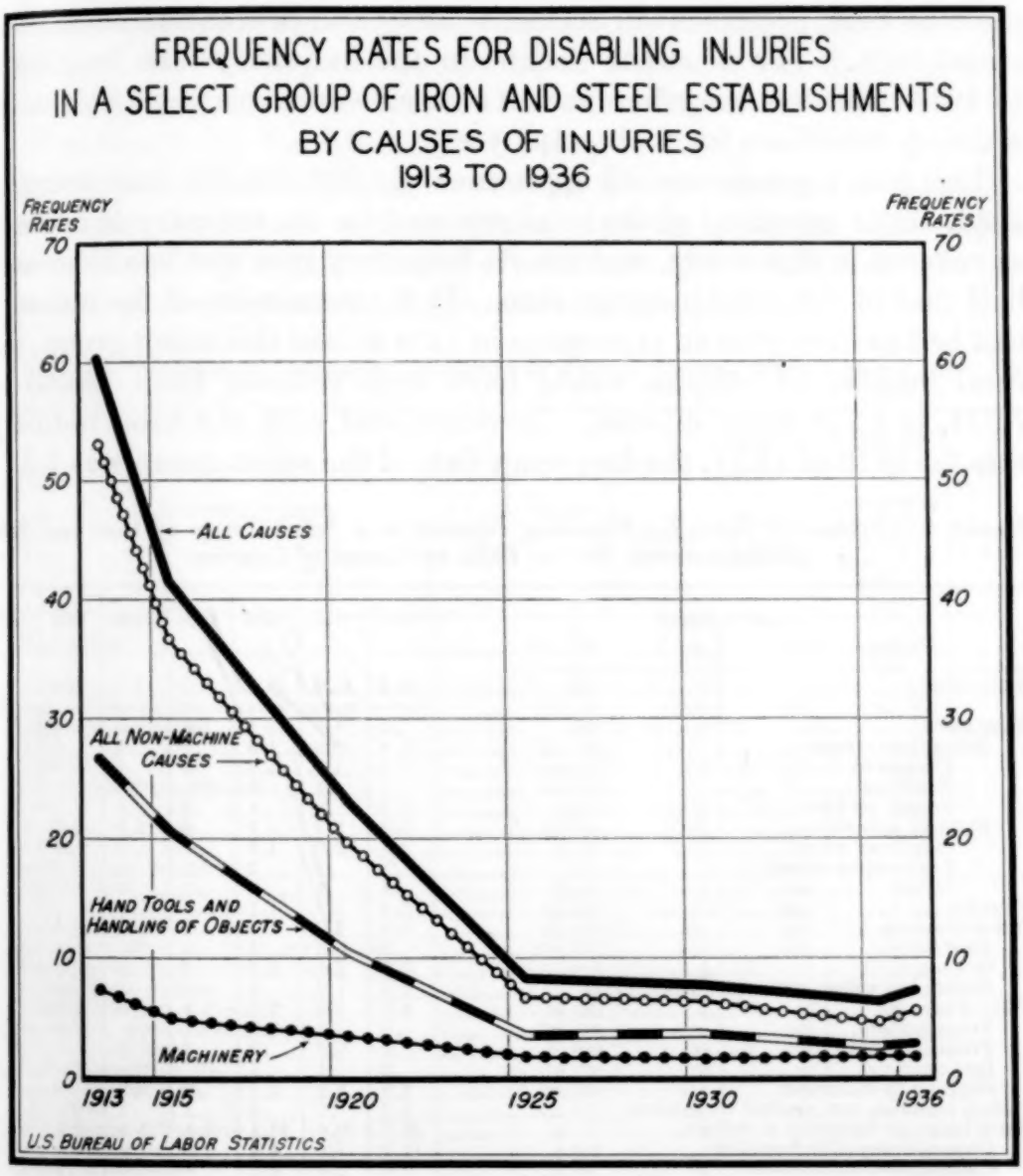
With the exception of bar mills, with an increase of 9 per 1,000 injuries, and strip mills, with an increase of 10, permanent partial disabilities in the melting and rolling group of departments decreased in 1936 as compared with 1935. The sharpest drop occurred in cold-rolling departments, which fell from 128 in 1935 to 22 in 1936. A significant drop also occurred in heavy-rolling mills, from 130 in 1935 to 80 in 1936. Average days lost for each permanent partial disability dropped very sharply in rod mills, from 1,200 in 1935 to 450 in 1936. Other departments showing noticeable drops in average number of days lost per permanent partial disability were hot mills, from 1,012 to 536; bar mills, from 1,520 to 1,000; strip mills, from 850 to 627; sheet mills, from 922 to 749; heavy-rolling mills, from 897 to 752; and open-hearth furnaces, from 981 to 774. The most noticeable increases in average days lost for this type of injury occurred in electric furnaces, from 300 in 1935 to 750 in 1936, and in plate mills, from 350 to 865. Bessemer converters also showed an increase, from 600 to 850.

Cold-rolling departments showed the largest increase in temporary total disabilities, increasing from 860 per 1,000 injuries in 1935 to 978 in 1936, indicating a corresponding decrease in fatal and permanent injuries. At the same time the number of days lost per disability decreased from 31 to 24. Changes in the other departments were relatively small. The number of average days lost per temporary total disability decreased in 9 out of the 15 departments. Three showed increases, and three remained unchanged. The increases were relatively small. The most significant decrease in days lost per disability was 18 days in rod mills. The decreases in days lost per disability for total temporary disabilities in over half of the departments indicated that the injuries were of a less severe nature in 1936 than in 1935.

For the finishing departments, changes in all types of injuries and the number of days lost per disability were of a minor nature. The number of fatalities and permanent total disabilities remained the same. A drop of 6 per 1,000 injuries, from 55 to 49, occurred in permanent partial disabilities. This was accompanied by a drop of 51 in days lost per disability, from 848 to 797. Temporary total dis-

abilities rose 6 in 1936, from 940 to 946, while the number of days lost per injury remained constant at 17 per disability.

A decrease of 3 deaths and permanent total disabilities for each 1,000 injuries in 1936 as compared with 1935 occurred in the service and maintenance departments. Permanent partial disabilities decreased from 112 in 1935 to 99 in 1936. This decrease was accompanied by a drop of 27 in days lost per disability, from 777 to 750. Temporary



total disabilities increased correspondingly from 851 in 1935 to 867 in 1936, with an average time loss of 35 days in 1935 and 33 days in 1936. Deaths and permanent total disabilities dropped in 1936 as compared with 1935 in electrical and mechanical departments. The former experienced a decrease from 75 in 1935 to 69 in 1936, and the latter from 30 in 1935 to 24 in 1936. The electrical departments also experienced a marked decrease in permanent partial disabilities, from 150 per 1,000

injuries in 1935 to 50 in 1936. Temporary total disabilities rose from 775 to 881, with the average number of days lost per disability at 39 in each of the 2 years.

Experience of a Select Group of Establishments

Table 6 and the accompanying chart give, by broad classifications of causes of injuries, the experience of a select group of establishments that has been prominent in accident safety and prevention work since about 1906. The constant decline in the frequency rate from 1913 to 1936 expresses the effectiveness of their endeavor to provide safer working conditions for their employees.

This select group worked approximately 300,000,000 man-hours in 1936, about one-third of the total reported for the industry as a whole as covered in this study, and yet its frequency rate was less than one-half that of the total industry rate. If the remainder of the industry had had as favorable an experience in 1936 as had this select group, the total number of injuries would have been reduced from 16,060 to 7,334, or 8,726 fewer injuries. As contrasted with the total industry rate for 1936 of 15.77, the frequency rate of the select group was 7.2.

TABLE 6.—*Frequency Rates for Disabling Injuries in a Select Group of Iron and Steel Establishments, 1913 to 1936, by Causes of Injuries*

Cause of injury	1913	1915	1920	1925	1930	1935	1936
All causes [1]	60.3	41.5	23.1	8.2	7.7	6.3	7.2
Machinery	7.3	4.9	3.4	1.6	1.5	1.7	1.7
Other than cranes	3.8	2.6	1.5	.7	.5	.6	.6
Caught in	2.5	1.7	1.0	.5	.4	.5	.4
Breaking	.1	.1	.1	(2)	(2)	(2)	(2)
Struck by load	1.2	.8	.4	.2	.1	.2	.2
Hoisting apparatus	3.5	2.3	1.9	.9	1.0	1.1	1.1
Overhead cranes	2.8	2.0	1.5	.7	.7	.7	.8
Locomotive cranes	.3	.2	.2	.1	.2	.3	.2
Other	.4	.1	.2	.1	.1	.1	.1
Vehicles	2.3	1.6	1.1	.3	.3	.2	.2
Hot substances	5.4	3.7	2.4	.6	.4	.4	.3
Electricity	.5	.2	.3	.1	(2)	.1	(2)
Hot metal	3.6	2.3	1.7	.4	.3	.3	.3
Steam, hot water, etc	1.3	1.2	.4	.1	.1	.1	.2
Falls of persons	4.5	3.5	2.5	1.1	1.0	1.0	1.0
From ladders	.3	.1	.1	.1	(2)	.1	.1
From scaffolds	.2	.2	.2	.1	.1	.1	.1
Into openings	.2	.1	.1	(2)	(2)	(2)	.1
Slipping or stumbling	3.8	3.1	2.1	.9	.9	.8	.8
Falling material, not handled by injured	1.2	.7	.2	.1	.1	(2)	.1
Hand tools and handling of objects	26.7	20.6	10.4	3.4	3.6	2.5	2.8
Objects dropped in handling	11.2	7.6	4.4	1.6	1.9	1.0	1.2
Caught between material	3.4	2.6	1.3	.4	.7	.4	.4
Hand trucks, etc	1.9	1.4	.6	.2	.2	.1	.1
Strain in handling	2.5	2.5	1.1	.3	.2	.3	.4
Objects flying from tools	.2	.1	.1	(2)	(2)	(2)	(2)
Slivers, sharp edges, etc	3.8	3.8	1.5	.4	.2	.4	.3
Hand tools	3.7	2.6	1.4	.5	.4	.4	.4
Miscellaneous	12.9	6.5	3.1	1.1	.8	.5	.8
Asphyxiation	.3	.1	.1	(2)	(2)	(2)	(2)
Objects flying from material, striking body	.8	.6	.3	.1	(2)	.1	.1
Objects flying from material, striking eye	2.9	1.7	1.1	.2	.2	.1	.2
Heat	.9	.4	.1	(2)	.1	(2)	(2)
Other	8.0	3.7	1.5	.8	.5	.3	.4

[1] Totals and subtotals are based on man-hours rather than on totals of rounded individual figures.
[2] Less than 1/10 of 1.

INDUSTRIAL ACCIDENTS IN FRANCE, 1935

EMPLOYERS in French industries are required to report to the office of the mayor all accidents causing incapacity for work, and a report may also be made by the person to whom the accident occurred or by his representative. If the injured person has not been able to resume work in 4 days, the employer must file a medical certificate in the same office indicating the probable results of the accident. Reports of accidents resulting in death or incapacity lasting more than 4 days must be referred at once to the labor inspector, or, if the accident occurred in a mine or quarry, to the mining engineer.

The report by the Ministry of Labor for the year 1935 shows the number of accidents lasting more than 4 lays reported in industries, in underground and surface mines, and in quarries. The figures given relate only to the number of accidents and do not show the total number of employees nor the exposure in man-hours.[1]

TABLE 1.—*Number of Industrial Accidents in France Lasting More Than 4 Days, 1935*

Industry or group	Total cases	Number of cases of—			
		Death	Permanent disability	Temporary disability lasting more than 4 days	Results unknown
All accidents	701,138	2,146	7,890	685,879	5,223
Fishing	331	1	1	329	
Forestry, agriculture	49,168	294	603	47,506	765
Extractive industries	508	2	7	491	8
Food	36,199	77	243	35,589	290
Chemical	27,243	66	148	26,836	193
Rubber, paper, pasteboard	11,234	24	104	11,041	65
Book	6,110	5	71	5,999	35
Textile	29,198	23	341	28,713	121
Clothing	5,457	7	27	5,357	66
Straw, feather, horsehair	377		4	373	
Hide and skin	7,543	6	88	7,417	32
Wood	25,057	39	557	24,250	211
Smelting	29,634	55	163	29,330	86
Metal manufacturing (ordinary metals)	124,855	134	1,034	122,927	760
Metal manufacturing (fine metals)	608	2	7	597	2
Precious-stone cutting	34		1	33	
Stone cutting and grinding	2,500	4	11	2,463	22
Earthwork, stone construction	88,359	399	492	86,582	886
Stone and tile work	16,928	28	76	16,743	81
Warehousing	12,706	25	61	12,555	65
Transportation	46,198	315	316	45,233	334
Commerce	52,012	120	258	51,189	445
Amusements, offices, etc	1,111	4	6	1,093	8
Banks, insurance, etc	1,073	4	10	1,038	21
Liberal professions	3,057	15	25	2,970	47
Personal service, domestic service	14,071	45	124	13,758	144
Services of State Departments and communes	21,762	78	117	21,311	256
Mines and quarries:					
Underground and surface mines and quarries	86,829	367	2,970	83,212	280
Chemicals	976	7	25	944	

[1] France. Ministère du Travail, Bulletin, October–December 1937, pp. 486–489.

Table 2 shows the number of accidents of different degrees of severity grouped according to age and sex:

TABLE 2.—*Number of Industrial Accidents in France, 1935, by Result, Age, and Sex*

Results of accidents	Total	Young persons under 18 years		Girls over over 18 and women	Men
		Boys	Girls		
All accidents	701,138	38,238	9,640	59,380	593,880
All industries	613,333	33,003	9,488	59,154	511,688
Death	1,772	50	3	71	1,648
Permanent disability	4,895	331	82	589	3,893
Temporary disability lasting more than 4 days	601,723	32,375	9,311	58,001	502,036
Results unknown	4,943	247	92	493	4,111
Mines and quarries	87,805	5,235	152	226	82,192
Death	374	8			366
Permanent disability	2,998	139	3	10	2,846
Temporary disability lasting more than 4 days	84,152	5,084	148	211	78,709
Results unknown	281	4	1	5	271

Court Decisions

COMPANY WITH LIMITED INTERSTATE BUSINESS SUBJECT TO LABOR RELATIONS ACT

ON MARCH 28, 1938, the Supreme Court of the United States held that the National Labor Relations Board had jurisdiction in a case involving unfair labor practices in labor relations at the Oakland, Calif., plant of a fruit-packing corporation, although the company's interstate business amounted to only 37 percent of its production (*Santa Cruz Fruit Packing Co.* v. *National Labor Relations Board*, 58 Sup. Ct. 656).

On April 2, 1936, the National Labor Relations Board, after a hearing, found that the Santa Cruz Fruit Packing Co. had been engaging in unfair labor practices. The Board ordered the company to stop such practices and to reinstate with back pay certain employees who had been discharged. The Circuit Court of Appeals affirmed the order of the Board so far as it related to employees at the Oakland plant.

The National Labor Relations Board, in making its findings, determined that the company was engaged in Oakland in canning, packing, and shipping fruits and vegetables most of which were grown in the State. During the peak season from 1,200 to 1,500 persons were employed. The total "pack" in the year 1935 amounted to about 1,699,270 cases, of which about 37 percent was shipped in interstate or foreign commerce.

The Board also found that the methods of transportation used included water, rail, and truck. There was a constant stream of loading and shipping of products out of the plant during the entire year. From 3,000 to 4,000 cases were loaded daily, and loading was a substantial and regular part of the work of the warehousemen in the employ of the company. The shipments by rail or by overland truck were loaded directly into the equipment of the principal carriers by these employees. When shipments were made by boat, the warehousemen loaded the cases on trucks which carried the goods to the docks.

A labor organization affiliated with the American Federation of Labor attempted to organize the Oakland plant in July 1935, and at that time many of the warehousemen made application for membership. When this came to the attention of the company, the general manager announced that he would not permit a union in the plant. Members

of the night shift, returning from a union meeting were prevented from entering the plant, and the following morning the members of the day crew were similarly denied admittance. On August 8 a picket line formed and was maintained until September 27, when the movement of trucks from warehouses to wharves ceased.

The National Labor Relations Board held that a company's interference with the employees in forming labor organizations results in strikes and industrial unrest and has had the effect of impeding the movement of canned products in interstate and foreign commerce. The Board concluded that the discharge of employees and subsequent refusal to reinstate them constituted an unlawful discrimination under the National Labor Relations Act, and that the acts of the company had caused labor disputes that burdened and obstructed commerce. The company, on the other hand, contended that the manufacturing and processing of fruits was a local activity and that the Board was without jurisdiction.

The Supreme Court, in considering the case, stated that the company undoubtedly was directly and largely engaged in interstate and foreign commerce. Mr. Chief Justice Hughes, who delivered the opinion of the Court, called attention to the fact that the power of Congress extends not only to the making of rules governing the sale of products in interstate commerce or with respect to price discriminations, but also to the protection of interstate commerce from burdens, obstructions, and interruptions, whatever may be their source. He said that "The close and intimate effect which brings the subject within the reach of Federal power may be due to activities in relation to productive industry, although that industry when separately viewed is local." It was upon this well-established principle, according to the Chief Justice, that the constitutional validity of the National Labor Relations Act was sustained.[1]

It was the contention of the fruit-packing company that this principle was inapplicable, since the fruits and vegetables prepared for shipment were grown in California, and the operations of the corporation were confined to that State. In answer to this contention, the Court said:

> It is not a case where the raw materials of production are brought into the State of manufacture and the manufactured product is handled by the manufacturer in other States. In view of the interstate commerce actually carried on by petitioner, the conclusion sought to be drawn from this distinction is without merit. The existence of a continuous flow of interstate commerce through the State may indeed readily show the intimate relation of particular transactions to that commerce. *Stafford* v. *Wallace*, 258 U. S. 495, 516; *Chicago Board of Trade* v. *Olsen*, 262 U. S. 1, 33. But, as we said in the Jones & Laughlin case, the instances in which the metaphor of a "stream of commerce" has been used are but particular,

[1] *National Labor Relations Board* v. *Jones & Laughlin Steel Corporation*, 301 U. S. 1. See analysis of case in Monthly Labor Review May 1937 (p. 1194).

and not exclusive, illustrations of the protective power which Congress may exercise. "The Congressional authority to protect interstate commerce from burdens and obstructions is not limited to transactions which can be deemed to be an essential part of a 'flow' of interstate or foreign commerce. Burdens and obstructions may be due to injurious actions springing from other sources."

It was the opinion of the Court that such injurious actions burdening and obstructing interstate trade in manufactured articles may spring from labor disputes irrespective of the origin of the materials used in the manufacturing process. Furthermore, the Court said, "the place where the manufacturer makes his sales is not controlling if the sales in fact are in interstate commerce."

The Court next discussed the question of the extent of the Federal power over activities which, separately considered, are intrastate. In such a case, Mr. Chief Justice Hughes said, "it must appear that there is a close and substantial relation to interstate commerce in order to justify the Federal intervention for its protection." And continuing he said that—

> However difficult in application, this principle is essential to the maintenance of our constitutional system. The subject of Federal power is still "commerce," and not all commerce but commerce with foreign nations and among the several States. The expansion of enterprise has vastly increased the interests of interstate commerce but the constitutional differentiation still obtains. *Schechter Corporation* v. *United States*, 295 U. S. 495, 546. "Activities local in their immediacy do not become interstate and national because of distant repercussions."

The Court did not consider it possible in this case to demand the drawing of a mathematical line, and stated that the fact that the sales in interstate and foreign commerce amounted to 37 percent and not to more than 50 percent of the production of the company cannot be deemed controlling. "The question that must be faced under the act upon particular facts," the Chief Justice said, "is whether the unfair labor practices involved have such a close and substantial relation to the freedom of interstate commerce from injurious restraint that these practices may constitutionally be made the subject of Federal cognizance through provisions looking to the peaceable adjustment of labor disputes."

The Court therefore concluded that the direct relation of the labor practices and the resulting dispute in this case to interstate commerce, and the injurious effect upon that commerce, were fully established. "The warehousemen in question were employed by petitioner in loading its goods either into the cars of carriers or into the trucks which transported the goods to the docks for shipment abroad or to other States. The immediacy of the effect of the forbidden discrimination against these warehousemen is strikingly shown by the findings of the Board."

The Court pointed out that when the men found themselves locked out because of their joining the union, they at once formed a picket

line and this was maintained with such effectiveness that eventually "the movement of trucks from warehouse to wharves ceased entirely." The teamsters refused to haul, the warehousemen at the dock warehouses declined to handle, and the stevedores between dock and ship refused to load petitioner's goods. These became, in the parlance of the men, "hot" cargo. "Petitioner says that this was an unlawful conspiracy of those sympathizing with its discharged warehousemen, but it was the discrimination against them which led directly to the interference with the movement from the plant and elicited the support so effectively given."

Finally, in holding that the Circuit Court of Appeals properly sustained the order of the National Labor Relations Board, the Court said: "It would be difficult to find a case in which unfair labor practices had a more direct effect upon interstate and foreign commerce."

PICKETING TO COMPEL EMPLOYMENT OF NEGROES HELD A LABOR DISPUTE

THE United States Supreme Court on March 28, 1938, held that an injunction may not be granted to prevent the picketing of a store by colored persons for the purpose of inducing the company to employ colored help. Such a controversy, the Court held, involved a "labor dispute" within the meaning of the Norris-LaGuardia Act. (*New Negro Alliance* v. *Sanitary Grocery Co., Inc.*, 58 Sup. Ct. 703.)

The case concerned the Sanitary Grocery Co. operating 255 grocery stores in the District of Columbia, and employing both white and colored persons. On April 3, 1936, the company opened a new store in a Negro section and hired the necessary personnel. After the new store was opened, the New Negro Alliance, an association composed of colored persons organized for the mutual improvement of its members, requested the grocery company to adopt a policy of employing negro clerks in certain of its stores. Upon the company's refusal, the Alliance placed a picket at the store, carrying a placard which read: "Do Your Part! Buy Where You Can Work! No Negroes Employed Here!" The Alliance also threatened to picket other stores of the company.

The grocery company thereupon brought suit in the District Court of the United States for the District of Columbia, seeking an injunction to restrain the Alliance from picketing its stores. The trial judge was of the opinion that the laws relating to labor disputes had no application to the case, and entered a decree enjoining the Alliance and its agents and employees from picketing or patrolling any of the stores or boycotting or urging others to boycott the grocery company. The United States Court of Appeals for the District of Columbia

affirmed this decree, holding that the case did not involve or grow out of a labor dispute within the meaning of the Norris-La Guardia Act. One member of the court thought that although the dispute involved terms and conditions of employment in the business of the grocery company, it was not within the act because essentially a racial dispute. The Alliance then appealed to the United States Supreme Court.

Subsection (a) of section 13 of the Norris-La Guardia Act provides: "A case shall be held to involve or grow out of a labor dispute when the case involves persons who are engaged in the same industry, trade, craft, or occupation; or have direct or indirect interests therein; * * * or when the case involves any conflicting or competing interests in a 'labor dispute.'" Subsection (b) characterizes a person or association as participating or interested in a labor dispute "if relief is sought against him or it and if he or it * * * has a direct or indirect interest therein * * *." Subsection (c) defines the term "labor dispute" as including "any controversy concerning terms or conditions of employment, * * * regardless of whether or not the disputants stand in the proximate relation of employer and employee."

After quoting these provisions of the Norris-La Guardia Act, Mr. Justice Roberts, who delivered the opinion of the Supreme Court, said that these definitions plainly embrace the controversy which gave rise to the suit and classify it as one arising out of a dispute defined as a labor dispute. He further said that "They leave no doubt that the New Negro Alliance and the individual petitioners are, in contemplation of the act, persons interested in the dispute." Continuing he said that—

> In quoting the clauses of Section 13 we have omitted those that deal with disputes between employers and employees and disputes between associations of persons engaged in a particular trade or craft, and employers in the same industry. It is to be noted, however, that the inclusion in the definitions of such disputes, and the persons interested in them, serves to emphasize the fact that the quoted portions were intended to embrace controversies other than those between employers and employees; between labor unions seeking to represent employees and employers; and between persons seeking employment and employers.

It was therefore the opinion of the Court that the nature of the dispute and interest of the parties brought the case squarely within the act unless, as suggested by the District Court and by one of the justices of the Court of Appeals, the case was taken out of the scope of the act by the fact that the dispute was "racial." As to this the Court said:

> We think this cannot be so. In the first place, the act does not concern itself with the background or the motives of the dispute. In the second place, the desire for fair and equitable conditions of employment on the part of persons of any race, color, or persuasion, and the removal of discrimination against them by reason of their race or religious belief is quite as important to those concerned as fairness and equity in terms and conditions of employment can be to trade or craft unions or any form of labor organization or association. * * *

Finally, the Court pointed out that the legislative history of the Norris-La Guardia Act demonstrates that it was the purpose of the Congress to extend the prohibitions of the Clayton Act respecting the exercise of jurisdiction by Federal courts and to obviate the results of the judicial construction of the act.

It was intended, that peaceful and orderly dissemination of information by those defined as persons interested in a labor dispute concerning "terms and conditions of employment" in an industry or a plant or a place of business should be lawful; that, short of fraud, breach of the peace, violence, or conduct otherwise unlawful, those having a direct or indirect interest in such terms and conditions of employment should be at liberty to advertise and disseminate facts and information with respect to terms and conditions of employment, and peacefully to persuade others to concur in their views respecting an employer's practices:

The Court therefore held that the district court erred in not complying with the provisions of the act, and reversed the decree granting an injunction.

Employment Conditions

COLLEGE STUDENTS AIDED BY NATIONAL YOUTH ADMINISTRATION, 1937–38

AS A RESULT of a substantial decrease in its appropriations, the National Youth Administration reduced by one-third the number of college and graduate students receiving Federal aid during the current fiscal year, as compared with last year.[1] Previously, separate allotments were made for college and graduate students, but this year the colleges and universities were assigned student quotas based on 8 percent of the combined enrollments of undergraduate and graduate students on October 1, 1936. For the current scholastic year the quota for the United States as a whole is 75,993, as compared with 124,818 during 1936–37.

The director points out that while "the quota of students represents 39 percent reduction over last year, it is interesting to note that actually during December 1937 only 32.6 percent fewer students were being aided. The reason for this is that the quotas were based on an average monthly payment of $15. In most of the institutions, however, because of the large number of applications for aid, this average payment has been reduced so as to assist as many students as possible. Thus in December 1937 preliminary figures show that the N. Y. A. paid an average wage of $11.72 to 95,025 college and graduate students. The average wage of the undergraduates was $11.58; while that of the graduate students was $17.77."

The total funds allotted for the academic year 1937–38 aggregated $10,236,726. The allocations to the States are on a monthly basis, generally over a period of 9 months but sometimes over a period of 8 months. The monthly allocation to all States, the District of Columbia, and Puerto Rico is $1,140,435.

Under a special fund of $70,000 set apart mainly for the aid of Negro graduate students in States which offer no advanced courses for their race, preliminary figures show that 271 students were being paid in December 1937 an average monthly wage of $21.83. Special leadership-training projects at Tuskegee Institute, Fiske University, and similar institutions are also being financed through this fund.

[1] The Works Program. The National Youth Administration. Press release, Washington, March 28, 1938.

OBLIGATORY DOMESTIC SERVICE FOR SINGLE WOMEN IN GERMANY

AS A MEASURE to relieve the shortage of domestic servants on farms and in large families in Germany, the administration of the Four Year Plan has decreed, in an ordinance published on February 22, 1938, that all single women under 25 years of age seeking employment in offices and certain trades must first perform a year's service in household work.[1]

The obligation entered into effect with regard to girls seeking employment after March 1, 1938. Exempted from its provisions are girls who have done household work for their own families or the families of relatives, provided that these families consist of four or more children under the age of 14. Inasmuch as the nursing profession and the various social and health services operated by the Government and the National Socialist Party are also in need of assistance, 2 years' work for these organizations will be accepted in fulfillment of the obligation. Farmers' daughters who wish later to look for industrial jobs are naturally considered as having met the requirement, but evidence as to their competence in houshold work must be furnished.

Specifically, the following are the occupations in which henceforth women can be employed only after having met the household-service requirement: The clothing, textile, and tobacco industries; commercial or secretarial work of any kind in Government or private offices. Before being established in employment the girls must provide themselves with a "labor book" (a sort of passport), in which the first entry will indicate their fulfillment of the service obligation. Girls undergoing apprenticeships or training courses will have to perform the necessary domestic service upon the completion of these courses and before taking up definite employment.

Time spent by girls in service in any one of the following institutions is apparently to be credited toward the completion of the statutory year: The voluntary women's labor service; the farm service (*Landdienst*) of the Band of German Girls; the State Farm Help (*Landhilfe*); as well as courses in farm and general household work which are to be instituted as part of the curriculum for the older members of the Band of German Girls. With respect to the arrangements to be made with individual families for whom the girls are to work, the latter are free to make these arrangements on their own initiative or through the instrumentality of the employment service of the State, which in general will be in charge of the execution of the details of the ordinance.

[1] Data are from report of Prentiss Gilbert, American chargé d'affaires ad interim, Berlin, dated March 1, 1938.

Profit Sharing

PROFIT-SHARING PLAN OF GENERAL ELECTRIC CO. [1]

A GENERAL profit-sharing plan was adopted by the General Electric Co. in 1934, but no payments were made in that year, as the earnings of the company were below the minimum required before the directors were authorized to set aside any amount for the purposes of the plan.

The plan provides that the directors may set aside and disburse in any year, out of the earnings of the company available for dividends on common stock after deduction of 8 percent of the average book value of the common stock, an amount not to exceed 12½ percent of the balance of such earnings. The plan is administered by a committee appointed by the board of directors from its own members. Originally the plan provided that employees who had had continuous service of not less than 5 years at the end of the year for which the allotment was made would be eligible for participation unless they received compensation under the extra-compensation plans for employees in executive and supervisory capacities. At the request of the employees the plan was modified, effective in 1936, to make payments semiannually instead of annually, and, effective in 1937, employees were made eligible for participation after 1 year of service, but on a graduated scale based on length of service.

Employees in each works, district office, general office department, and subdivision of the company are covered by the plan. The total amount of earnings of employees in each of these units is determined and such proportion of the general profit-sharing fund is set aside for each such group as the ratio of earnings of participants in that group bears to the total earnings of all participants. Approximately 80 percent of the amount so arrived at is prorated among the group. The manager of each industrial or office group makes recommendations to the president, through the executive officer in charge, for the remainder of the approximately 20 percent of the fund set aside for his group. This balance may be allotted in whole or in part to all participants in the group, in proportion to their annual earnings, and any remainder not so allotted may be paid to participants in the group who have done outstanding work for the company during the year and who, it is considered, will be encouraged by such recognition to still greater growth in the future.

[1] Data are from General Electric Co. reports: General Profit Sharing Plan, Effective January 1, 1934; and Forty-sixth Annual Report, 1937.

The payments may be paid in full in cash, or the committee may as soon as possible after the allotment, notify each employee of the amount of his share and if the employee does not, within 15 days, elect to receive the full amount in cash the committee will deposit 5 percent bonds to his credit with the custodians of the G. E. Employees' Securities Corporation. Bonds so deposited will receive additional payments under the same conditions as bonds purchased by the employees. Allotments of less than $50, and amounts in excess of $50 or multiples of that amount are deposited to the credit of the employee in the income accumulation account, and when credits in this account amount to $50, additional bonds are issued and deposited to the credit of the employee with the custodians.

The board of directors is empowered to change any of the provisions of the plan (except the amount of the appropriation, which may not be increased) or to terminate the plan. Notice of changes or termination, however, must be given by the company at least 60 days before the beginning of the calendar year in which the changes or termination are to become effective.

The annual report of the company for the year 1937 shows that the amount of available earnings for distribution under the plan was $5,761,140 in that year as compared with $2,937,934 in 1936. The difference between earnings and payments for 1937 was $288,828 which will be added to the amount to be distributed under the plan in 1938.

Industrial Disputes

ANALYSIS OF STRIKES IN JANUARY 1938 [1]

THE BUREAU has received detailed information on 140 strikes which began in January 1938, in which 32,066 workers were involved. The following analysis is based on these strikes and on 120 which continued into January from 1937, making a total of 260 strikes in progress during the month in which 52,589 workers were involved. There were approximately 471,000 man-days of idleness in January because of these strikes.

The industry groups with the most new strikes in January were trade, mostly retail (20), building and construction (18), personal service (15), textiles and transportation industries (12 each), and the food industries and mining (8 each). The most man-days of idleness because of strikes were in textiles (77,584), the lumber industries (49,362), trade (47,183), mining (46,445), the food industries (38,894), and paper and printing (33,272).

TABLE 1.—*Strikes in January 1938, by Industry*

Industry	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
All industries	**140**	**32,066**	**260**	**52,589**	**470,965**
Iron and steel and their products, not including machinery	**5**	**2,236**	**9**	**2,968**	**17,462**
Blast furnaces, steel works, and rolling mills	2	2,000	3	2,311	9,287
Steam and hot-water heating apparatus and steam fittings			1	140	2,940
Stoves	1	80	2	267	4,487
Structural and ornamental metalwork			1	94	94
Tin cans and other tinware	1	6	1	6	54
Wirework	1	150	1	150	600
Machinery, not including transportation equipment	**5**	**968**	**10**	**1,636**	**13,280**
Electrical machinery, apparatus, and supplies	2	280	3	443	4,948
Foundry and machine-shop products	2	680	5	1,108	7,686
Other	1	8	2	85	646
Transportation equipment	**2**	**59**	**5**	**846**	**14,256**
Automobiles, bodies and parts			3	787	13,841
Shipbuilding	2	59	2	59	415

[1] Detailed information on a few January strikes has not yet been received. Data on missing strikes will be included in the annual report. Information on strikes occurring since January indicates that there were about as many strikes in February 1938 as in January but the number of workers involved and the number of man-days idle were greater in February by more than one-fourth. In March the number of strikes, according to preliminary estimates, increased to about 235 involving approximately 52,000 workers. There were about 875,000 man-days of idleness because of strikes in March.

TABLE 1.—*Strikes in January 1938, by Industry*—Continued

Industry	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
Nonferrous metals and their products	**6**	**1,583**	**8**	**1,756**	21,007
Aluminum manufactures	1	115	1	115	1,150
Brass, bronze, and copper products	1	35	2	58	1,043
Lighting equipment	1	1,200	1	1,200	13,200
Silverware and plated ware	1	86	1	86	430
Smelting and refining—copper, lead, and zinc	1	117	1	117	1,404
Stamped and enameled ware			1	150	3,750
Other	1	30	1	30	30
Lumber and allied products	**2**	**402**	**13**	**4,349**	49,362
Furniture	1	202	4	336	3,960
Millwork and planing			1	55	55
Sawmills and logging camps	1	200	6	3,737	42,074
Other			2	221	3,273
Stone, clay, and glass products	**1**	**70**	**7**	**1,061**	16,933
Brick, tile, and terra cotta			1	150	3,750
Cement			2	515	5,755
Glass			1	23	575
Marble, granite, slate, and other products			1	175	3,675
Other	1	70	2	198	3,178
Textiles and their products	**12**	**2,454**	**30**	**6,651**	77,584
Fabrics:					
Cotton goods	2	835	4	1,462	20,637
Dyeing and finishing textiles			1	120	3,120
Silk and rayon goods	1	86	3	211	3,057
Woolen and worsted goods	1	28	4	1,275	16,989
Wearing apparel:					
Clothing, men's	1	21	1	21	84
Clothing, women's	3	1,098	7	1,514	4,905
Men's furnishings			1	90	1,170
Shirts and collars	1	30	2	220	1,200
Hosiery			3	782	10,842
Knit goods	3	356	3	356	2,980
Other			1	600	12,600
Leather and its manufactures	**4**	**531**	**9**	**1,176**	14,719
Boots and shoes	4	531	6	580	4,412
Leather			2	505	10,125
Other leather goods			1	91	182
Food and kindred products	**8**	**8,123**	**16**	**8,998**	38,894
Baking	1	21	5	338	3,734
Beverages	1	2,200	1	2,200	13,200
Canning and preserving	2	180	4	333	3,576
Confectionery			1	290	7,250
Flour and grain mills			1	115	1,495
Slaughtering and meat packing	1	23	1	23	46
Sugar refining, cane	1	649	1	649	4,543
Other	2	5,050	2	5,050	5,050
Tobacco manufactures	**1**	**480**	**2**	**1,120**	11,840
Cigars	1	480	2	1,120	11,840
Paper and printing	**5**	**4,292**	**13**	**5,217**	33,272
Boxes, paper			2	536	5,135
Paper and pulp	1	18	2	134	1,526
Printing and publishing:					
Book and job	1	6	2	23	411
Newspapers and periodicals	2	4,020	5	4,102	17,586
Other	1	248	2	422	8,614
Chemicals and allied products			2	677	11,517
Paint and varnishes			1	227	4,767
Other			1	450	6,750
Rubber products	**1**	**52**	**1**	**52**	884
Other rubber goods	1	52	1	52	884
Miscellaneous manufacturing	**4**	**361**	**6**	**391**	3,783
Electric light, power, and manufactured gas			1	20	240
Other	4	361	5	371	3,543

TABLE 1.—*Strikes in January 1938, by Industry*—Continued

Industry	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
Extraction of minerals	**8**	**3,639**	**13**	**4,682**	**46,445**
Coal mining, anthracite	5	2,713	6	2,943	27,586
Coal mining, bituminous	1	478	4	1,255	16,363
Metalliferous mining	2	448	2	448	1,740
Crude petroleum producing			1	36	756
Transportation and communication	**12**	**2,092**	**19**	**2,563**	**22,527**
Water transportation	4	1,435	8	1,833	19,059
Motortruck transportation	6	617	8	670	3,193
Taxicabs and miscellaneous			1	20	120
Electric railroad	1	15	1	15	30
Steam railroad	1	25	1	25	125
Trade	**20**	**2,291**	**36**	**4,583**	**47,183**
Wholesale	6	178	9	716	10,866
Retail	14	2,113	27	3,867	36,317
Domestic and personal service	**15**	**542**	**25**	**1,743**	**13,958**
Hotels, restaurants, and boarding houses	5	160	10	1,008	9,356
Laundries	8	224	11	465	2,115
Elevator and maintenance workers (when not attached to specific industry)	2	158	3	215	1,332
Other			1	55	1,155
Professional service	**2**	**132**	**2**	**132**	**1,092**
Recreation and amusement	2	132	2	132	1,092
Building and construction	**18**	**923**	**23**	**1,051**	**9,465**
Buildings, exclusive of P. W. A	10	316	12	344	3,753
All other construction (bridges, docks, etc., and P. W. A. buildings)	8	607	11	707	5,712
Agriculture and fishing	**2**	**93**	**2**	**93**	**633**
Agriculture	2	93	2	93	633
W. P. A., relief and resettlement projects	**3**	**550**	**3**	**550**	**2,850**
Other nonmanufacturing industries	**4**	**193**	**6**	**294**	**2,019**

Of the 140 strikes which began in January, 42 were in New York, 21 were in Pennsylvania, and 10 were in California. The strikes in these three States amounted to 52 percent of the total for all States. The most man-days of idleness during the month were in New York (75,244), Pennsylvania (67,045), Oregon (46,970), and California (36,563).

Only three of the 260 strikes in progress during the month extended into two or more States. The largest of these was the 1-week strike against wineries in New York City and New Jersey which began January 15.

One-fourth of the strikes beginning in January involved fewer than 20 workers each; 43 percent involved from 20 to 100 workers each; and about 23 percent involved from 100 to 500 workers each. Only 9 percent of the strikes involved as many as 500 workers each. The average number involved in the 140 strikes was 229. In table 3 the strikes in each industry group are classified according to the number of workers involved.

TABLE 2.—*Strikes in January 1938, by States*

State	Beginning in January		In progress during January		Man-days idle during January
	Number	Workers involved	Number	Workers involved	
All States	140	32,066	260	52,589	470,965
Alabama	1	200	6	1,049	22,013
California	10	748	22	2,584	36,563
Connecticut	1	115	2	138	1,725
District of Columbia	2	104	4	140	1,204
Florida	2	505	3	528	1,610
Illinois	6	833	10	1,741	24,905
Indiana	3	416	10	1,523	26,902
Iowa	2	68	4	272	1,040
Kentucky			3	371	7,395
Louisiana	1	45	1	45	135
Maryland	1	21	1	21	84
Massachusetts	6	793	11	1,470	15,012
Michigan	3	701	4	724	3,557
Minnesota	2	64	3	464	1,600
Missouri	5	494	11	1,564	18,869
Montana			1	30	750
New Hampshire	3	875	3	875	5,850
New Jersey	4	2,164	14	2,805	16,909
New York	42	3,999	62	7,170	75,244
North Carolina	1	410	3	837	9,387
Ohio	3	125	5	406	2,730
Oklahoma	4	229	6	359	3,459
Oregon	2	4,045	5	7,182	46,970
Pennsylvania	21	5,014	32	7,078	67,045
Rhode Island			1	500	7,750
South Carolina			1	175	3,675
South Dakota	1	54	1	54	54
Tennessee	1	9	4	234	4,063
Texas	1	5,000	2	5,115	6,495
Utah	1	250	2	269	1,168
Virginia	4	50	4	50	262
Washington	3	1,403	10	2,354	26,332
West Virginia			1	70	1,750
Wisconsin	2	132	5	747	9,253
Interstate	2	3,200	3	3,645	19,205

TABLE 3.—*Strikes Beginning in January, 1938, Classified by Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—					
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000
All industries	140	35	61	32	3	8	1
Manufacturing							
Iron and steel and their products, not including machinery	5	1	1	2		1	
Machinery, not including transportation equipment	5	1	2	1	1		
Transportation equipment	2		2				
Nonferrous metals and their products	6		3	2		1	
Lumber and allied products	2			2			
Stone, clay, and glass products	1		1				
Textiles and their products	12	1	7	3		1	
Leather and its manufactures	4	1	1	2			
Food and kindred products	8		4	1	1	1	1
Tobacco manufactures	1			1			
Paper and printing	5	2	1	1		1	
Rubber products	1		1				
Miscellaneous manufacturing	4	2	1	1			
Nonmanufacturing							
Extraction of minerals	8		2	4	1	1	
Transportation and communication	12	4	4	3		1	
Trade	20	8	8	3		1	
Domestic and personal service	15	5	9	1			
Professional service	2	1		1			
Building and construction	18	9	7	2			
Agriculture and fishing	2		2				
W. P. A., relief, and resettlement projects	3		1	2			
Other nonmanufacturing industries	4		4				

A little less than half (47 percent) of the strikes beginning in January were called principally over the issue of recognition or other union-organization matters. In 29 percent of the strikes the major issues were wages and hours, while in 24 percent they were miscellaneous matters including union rivalry, jurisdiction, and miscellaneous grievances not properly classifiable under the other headings shown in table 4. About 36 percent of the 32,066 workers involved were in the wage-and-hour strikes, 41½ percent were in the disputes over union-organization matters, and 22 percent were in the miscellaneous group of strikes.

TABLE 4.—*Major Issues Involved in Strikes Beginning in January 1938*

Major issue	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues	140	100.0	32,066	100.0
Wages and hours	41	29.3	11,610	36.2
Wage increase	27	19.3	6,638	20.7
Wage decrease	8	5.7	653	2.0
Wage increase, hour decrease	6	4.3	4,319	13.5
Union organization	66	47.1	13,312	41.5
Recognition	7	5.0	673	2.1
Recognition and wages	13	9.3	6,190	19.3
Recognition and hours	1	.7	9	(1)
Recognition, wages, and hours	16	11.4	2,668	8.3
Closed shop	17	12.1	1,432	4.5
Discrimination	7	5.0	496	1.5
Other	5	3.6	1,844	5.8
Miscellaneous	33	23.6	7,144	22.3
Rival unions or factions	5	3.6	358	1.1
Jurisdiction	4	2.9	262	.8
Other	23	16.4	6,510	20.4
Not reported	1	.7	14	(1)

[1] Less than 1/10 of 1 percent.

About 57 percent (148) of the 260 strikes in progress during January were terminated during the month. The average duration of these strikes was 31 calendar days. Approximately 37 percent of them lasted less than a week, 32 percent lasted from a week to a month, 20 percent had been in effect from 1 to 3 months, and 16 strikes (11 percent) had been in progress for 3 months or more.

Approximately 45 percent of the strikes ending in January, including 58 percent of the total workers involved, were settled with the assistance of Government conciliators and labor boards. Thirty-five percent of the strikes, in which 30 percent of the total workers were involved, were settled by negotiations directly between employers and representatives of organized workers. Twenty strikes, in which 8 percent of the workers were involved, were terminated without formal settlements. In most of these cases the strikes were lost when production was resumed either with new or old workers or the employers against whom the strikes were directed went out of business.

TABLE 5.—*Duration of Strikes Ending in January 1938*

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries	148	55	34	13	19	11	16
Manufacturing							
Iron and steel and their products, not including machinery	4	2	1	1			
Machinery, not including transportation equipment	8	3	2			1	2
Transportation equipment	4	1	1			2	
Nonferrous metals and their products	3	1		1	1		
Lumber and allied products	8		1		4	1	2
Stone, clay, and glass products	2					1	1
Textiles and their products	16	6	1	1	1	2	5
Leather and its manufactures	6	2	1	2	1		
Food and kindred products	8	2	3	1		1	1
Paper and printing	8	2	1	1	3		1
Miscellaneous manufactures	3		1	1		1	
Nonmanufacturing							
Extraction of minerals	8	5	3				
Transportation and communication	15	8	3	1	1	1	1
Trade	19	9	5	1	4		
Domestic and personal service	18	7	5	2	1		3
Professional service	1	1					
Building and construction	11	3	5	1	2		
Agriculture and fishing	1		1				
W. P. A., relief, and resettlement projects	1	1					
Other nonmanufacturing industries	4	2			1	1	

TABLE 6.—*Methods of Negotiating Settlements of Strikes Ending in January 1938*

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	148	100.0	28,540	100.0
Employers and workers directly	2	1.4	24	.1
Employers and representatives of organized workers directly	52	35.1	8,712	30.5
Government conciliators or labor boards	67	45.3	16,695	58.5
Private conciliators or arbitrators	7	4.7	708	2.5
Terminated without formal settlement	20	13.5	2,401	8.4

Results of strikes ending in January 1938 are indicated in tables 7 and 8, the latter table showing results in relation to the major issues involved. About 32 percent of the strikes, involving 35 percent of the total workers, resulted in substantial gains to the workers; 36 percent of the strikes, including 47 percent of the workers involved, brought them partial gains or compromise settlements; and 24 percent of the strikes, which included 14 percent of the total workers, resulted in little or no gains.

TABLE 7.—*Results of Strikes Ending in January 1938*

Result	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	148	100.0	28,540	100.0
Substantial gains to workers	48	32.4	10,012	35.1
Partial gains or compromises	53	35.9	13,466	47.1
Little or no gains to workers	35	23.6	4,077	14.3
Jurisdiction, rival union, or faction settlements	12	8.1	985	3.5

TABLE 8.—*Results of Strikes Ending in January 1938, in Relation to Major Issues Involved*

Major issue	Totals	Strikes resulting in—			
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union or faction settlements
	Number of strikes				
All issues	148	48	53	35	12
Wages and hours	41	13	18	10	----
Wage increase	22	5	12	5	----
Wage decrease	10	3	3	4	----
Wage increase, hour decrease	9	5	3	1	----
Union organization	76	28	25	23	----
Recognition	11	4	3	4	----
Recognition and wages	16	9	4	3	----
Recognition and hours	1	1	----	----	----
Recognition, wages, and hours	23	5	10	8	----
Closed shop	14	6	5	3	----
Discrimination	4	1	1	2	----
Other	7	2	2	3	----
Miscellaneous	31	7	10	2	12
Rival unions or factions	5	----	----	----	5
Jurisdiction	7	----	----	----	7
Other	19	7	10	2	----
	Number of workers involved				
All issues	28,540	10,012	13,466	4,077	985
Wages and hours	10,622	1,879	6,925	1,818	----
Wage increase	4,889	1,233	2,061	1,595	----
Wage decrease	1,360	336	829	195	----
Wage increase, hour decrease	4,373	310	4,035	28	----
Union organization	11,234	5,216	3,954	2,064	----
Recognition	1,682	958	552	172	----
Recognition and wages	1,855	836	427	592	----
Recognition and hours	9	9	----	----	----
Recognition, wages, and hours	3,585	2,297	724	564	----
Closed shop	1,454	850	551	53	----
Discrimination	532	20	300	212	----
Other	2,117	246	1,400	471	----
Miscellaneous	6,684	2,917	2,587	195	985
Rival unions or factions	535	----	----	----	535
Jurisdiction	450	----	----	----	450
Other	5,699	2,917	2,587	195	----

The strikes in which union-organization matters were the major issues exceeded the wage and hour strikes in number and, on the

whole, appeared to be the more successful, proportionately, from the point of view of the workers. This is true especially in terms of the number of workers involved. Of the workers involved in the wage and hour strikes 18 percent substantially won their demands, 65 percent obtained partial gains or compromises, and 17 percent gained little or nothing. In the disputes over union-organization matters 46 percent substantially won their demands, 35 percent obtained compromises, and 18 percent gained little or nothing.

ANALYSIS OF STRIKES IN 1937 [1]

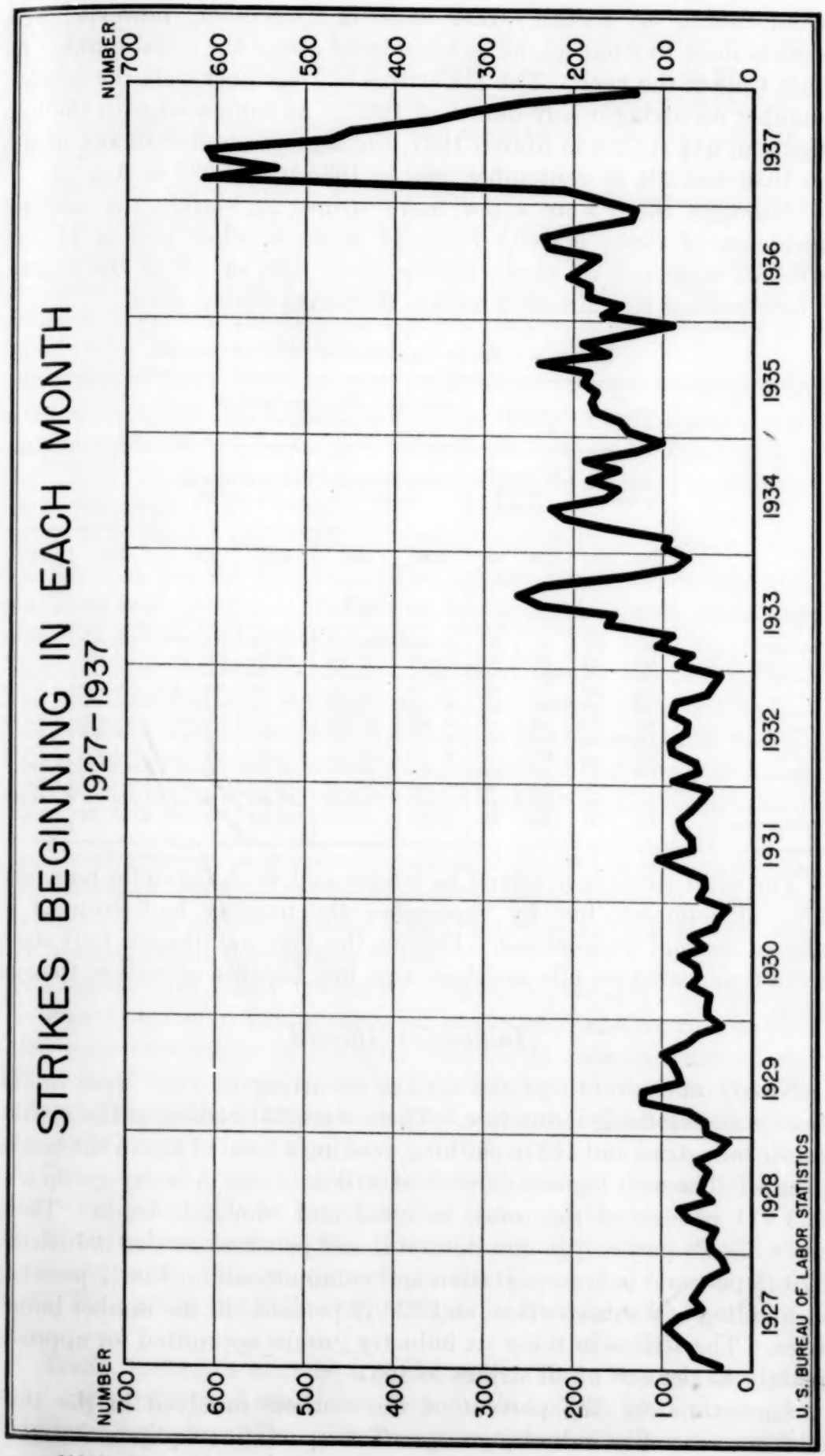
THERE were 4,740 strikes which began in the United States during 1937, in which 1,860,621 workers were involved. These workers lost approximately 28,425,000 man-days of work while strikes were in progress during the year. The number of strikes was the highest for any year in the country's history. However, there were more than twice as many workers involved in strikes in 1919 than in 1937. There were more man-days of idleness during strikes in 1937 than in any year since 1927—the earliest year for which information on man-days is available. As compared with 1936, there were increases in 1937 of 118 percent in number of strikes, 136 percent in number of workers involved, and 104 percent in man-days of idleness.

It is believed that the 4,740 strikes recorded for 1937 include practically all strikes of any importance which occurred during the year. The Bureau relies chiefly upon the public press and trade and labor papers for first notices or "leads" regarding strikes. To get detailed and authentic information on each case, schedules are sent directly to the parties involved. An attempt is made to include all strikes which involve as many as six workers and last as long as one full working day or shift. Notices were received concerning 30 strikes during the year on which detailed and verified information could not be obtained. These cases, of course, are not included in this report. It is likely that some of them were only threatened strikes or stoppages which lasted less than a day. With the exception of these cases it is believed that the yearly figures are complete.

Monthly Trend

Strikes in January and February 1937 were not unusually high in number, although somewhat higher than in the corresponding months of preceding years. In March, however, the number of strikes increased to 614—one of the highest figures for a single month in the country's history. In April the number of strikes dropped to 535 but rose again to 604 in May and 610 in June. Beginning with July the unusual wave of strikes began to recede and the number declined

[1] Prepared by Don Q. Crowther of the Bureau's Industrial Relations Division.


STRIKES BEGINNING IN EACH MONTH
1927–1937
NUMBER
700
600
500
400
300
200
100
0
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
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from month to month. Not until in December, however, were strikes back to what might be considered about the usual number for that time of the year. The 131 strikes in December were the smallest number occurring in any month of 1937. As compared with the high figure of 614 strikes in March 1937, the highest number in any month in 1936 was 234 in September, and in 1935 it was 239 in August.

Although there were a few more strikes in March, the heaviest incidence of strike activity occurred in June, when almost 475,000 workers were out on strike during some part or all of the month. These persons lost almost 5 million workdays during June.

TABLE 1.—*Strikes in 1936 and 1937, by Months*

Month	Number of strikes—				Number of workers involved in strikes—				Man-days idle during month	
	Beginning in month		In progress during month		Beginning in month		In progress during month			
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
Year	2,172	4,740	------	------	788,648	1,860,621	----------	----------	13,901,956	28,424,857
January	167	171	251	271	32,406	108,621	59,153	214,268	635,519	2,720,281
February	148	211	250	350	63,056	99,335	89,735	226,329	748,491	1,491,268
March	185	614	304	760	75,191	290,324	122,162	358,155	1,331,162	3,288,979
April	183	535	313	785	65,379	221,572	95,526	394,178	699,900	3,377,223
May	206	604	340	877	72,824	325,499	123,030	445,170	1,019,171	2,982,735
June	188	610	309	940	63,429	281,478	133,531	474,954	1,327,678	4,968,408
July	173	472	324	830	38,017	143,678	125,281	353,682	1,105,480	3,007,819
August	228	449	355	746	68,752	143,033	118,268	238,828	911,216	2,270,380
September	234	361	379	656	65,994	88,967	130,875	160,241	1,063,100	1,449,948
October	192	320	335	583	100,845	67,242	148,570	127,109	1,053,878	1,181,914
November	136	262	252	467	70,116	68,929	157,007	118,632	1,940,628	981,697
December	132	131	258	333	72,639	21,943	184,859	60,518	2,065,733	674,205

The total workers involved in strikes and workdays idle remained high all summer, but by September the number had dropped to almost normal proportions. During the late months of 1937 there were fewer workers idle and less time lost because of strikes than in 1936.

Industries Affected

Nearly one-seventh of the strikes occurring in 1937 were in the textile and clothing industries. There were 231 strikes in the textile-fabric industries and 449 in clothing, making a total of 680 in the textile group. The next highest number of strikes in any industry group was 523 (11 percent of the total) in retail and wholesale trade. There were 372 (8 percent) in the domestic and personal service industries, 370 (8 percent) in transportation and communication, 328 (7 percent) in building and construction, and 326 (7 percent) in the lumber industries. The strikes in these six industry groups accounted for approximately 55 percent of all strikes in 1937.

Approximately 57½ percent of the workers involved in the 1937 strikes were in five industry groups: Transportation equipment manu-

facturing industries (372,399, or 20 percent) where there were large strikes in automobile manufacturing; textiles (213,455, or 11½ percent); iron and steel (186,017, or 10 percent); extraction of minerals (162,645, or 9 percent); and transportation and communication (135,489, or 7 percent).

There were more than a million man-days of idleness because of strikes in each of the following nine industry groups:

1. Transportation equipment, 4,720,686 man-days of idleness. The automobile industry accounted for most of this. The largest strikes were against the General Motors Corporation in January and the Chrysler Corporation in March.

2. Textiles, 3,827,398 man-days of idleness. In textiles there were no extensive strikes during the year. The many days of idleness were due to the net effect of the large number (680) of relatively small strikes. The largest textile strike of the year was in the silk industry in Pennsylvania, New Jersey, and New York.

3. Iron and steel industries, 3,405,840 man-days of idleness. The largest strike was the C. I. O. strike against four independent steel companies with branches in Illinois, Indiana, Maryland, Michigan, New York, Ohio, and Pennsylvania.

4. Extraction of minerals, 2,617,559 man-days of idleness. These were principally in coal-mining strikes, the largest of which were a State-wide strike in Alabama in April, one in the Pennsylvania anthracite field in May, the strike in mines owned by the steel companies where a steel strike was in progress, and a strike in Illinois coal fields in July.

5. Transportation and communication, 1,868,974 man-days of idleness. Most of the man-days idle in these industries were due to the maritime strikes on both coasts, which began in the fall of 1936 and were not settled until February 4, 1937.

6. Lumber and allied products, 1,797,619 man-days of idleness. The largest strikes in this group were in sawmills and logging camps. There were two strikes in northern Minnesota (one in January and another in October), one in northern Michigan in May, and one in Portland, Oreg., which began in August and was still unsettled at the close of the year.

7. Domestic and personal service, 1,447,465 man-days of idleness. These were principally in hotels, restaurants, and laundries.

8. Machinery manufacturing, 1,344,258 man-days of idleness. The largest strikes in this group were at the Caterpillar tractor plant, Peoria, Ill., and at the Philco radio plants in Philadelphia, Pa., during April.

9. Trade, 1,036,574 man-days of idleness. There was no one strike in the trade industries which was responsible for any large proportion of the total man-days idle. The many man-days of idleness resulted,

rather, from the large number (523) of comparatively small strikes. The largest strike in the group, in terms of numbers involved, was the short strike of department-store employees in Providence, R. I., which occurred in March.

TABLE 2.—*Strikes in 1937, by Industry*

Industry	Number of strikes beginning in 1937	Number of workers involved	Man-days idle during 1937
All industries	**4,740**	**1,860,621**	**28,424,857**
Iron and steel and their products, not including machinery	**226**	**186,017**	**3,405,840**
Blast furnaces, steel works, and rolling mills	39	136,923	2,555,924
Bolts, nuts, washers, and rivets	9	5,733	111,002
Cast-iron pipe and fittings	10	3,926	51,948
Cutlery (not including silver and plated cutlery) and edge tools	10	5,311	49,737
Forgings, iron and steel	7	1,782	53,042
Hardware	19	4,425	73,804
Plumbers' supplies and fixtures	13	2,411	34,325
Steam and hot-water heating apparatus and steam fittings	14	3,999	40,653
Stoves	23	7,433	212,376
Structural and ornamental metalwork	16	1,978	40,648
Tin cans and other tinware	14	5,690	79,064
Tools (not including edge tools, machine tools, files, and saws) (hand tools)	13	441	4,736
Wirework	15	2,235	29,867
Other	24	3,730	68,714
Machinery, not including transportation equipment	**261**	**91,625**	**1,344,258**
Agricultural implements	14	3,158	93,239
Cash registers, adding machines, and typewriters	3	281	4,951
Electrical machinery, apparatus, and supplies	70	29,901	538,266
Engines, turbines, tractors, and water wheels	1	10,910	32,730
Foundry and machine-shop products	89	15,963	155,158
Machine tools (power driven)	6	712	9,899
Radios and phonographs	16	13,468	259,669
Textile machinery and parts	1	104	520
Other	61	17,128	249,826
Transportation equipment	**165**	**372,399**	**4,720,686**
Aircraft	6	9,390	90,964
Automobiles, bodies and parts	127	331,624	3,825,686
Cars, electric- and steam-railroad	13	10,236	119,318
Locomotives	1	30	60
Shipbuilding	10	19,827	664,395
Other	8	1,292	20,263
Nonferrous metals and their products	**117**	**29,044**	**677,739**
Aluminum manufactures	9	7,533	168,324
Brass, bronze, and copper products	12	4,085	84,651
Clocks and watches and time-recording devices	8	1,847	29,944
Jewelry	11	742	16,614
Lighting equipment	13	2,092	49,681
Silverware and plated ware	3	251	3,274
Smelting and refining—copper, lead, and zinc	6	3,401	138,886
Stamped and enameled ware	31	6,181	141,859
Other	24	2,912	44,506
Lumber and allied products	**326**	**76,990**	**1,797,619**
Furniture	158	26,865	460,506
Millwork and planing	48	8,234	210,986
Sawmills and logging camps	50	31,192	875,251
Other	70	10,699	250,876
Stone, clay, and glass products	**106**	**24,180**	**612,010**
Brick, tile, and terra cotta	33	5,160	106,579
Cement	8	2,207	58,637
Glass	19	4,440	310,278
Marble, granite, slate, and other products	7	548	19,169
Pottery	10	7,450	58,495
Other	29	4,375	58,852
Textiles and their products	**680**	**213,455**	**3,827,398**
Fabrics	231	89,735	1,663,778
Carpets and rugs	5	1,511	26,049
Cotton goods	42	17,427	336,189
Cotton small wares	8	2,076	39,906
Dyeing and finishing textiles	26	5,013	73,895
Silk and rayon goods	63	42,903	552,660
Woolen and worsted goods	38	12,121	426,670
Other	49	8,684	208,409

TABLE 2.—*Strikes in 1937, by Industry*—Continued

Industry	Number of strikes beginning in 1937	Number of workers involved	Man-days idle during 1937
Textiles and their products—Continued			
Wearing apparel	449	136,720	2,192,620
Clothing, men's	46	12,549	151,293
Clothing, women's	179	36,499	472,038
Corsets and allied garments	8	1,862	8,655
Men's furnishings	17	1,412	11,409
Hats, caps, and millinery	26	11,636	172,486
Shirts and collars	26	18,771	137,103
Hosiery	60	23,635	826,695
Knit goods	44	7,917	154,999
Other	43	9,439	228,942
Leather and its manufactures	**142**	**41565**	**630,405**
Boots and shoes	79	29,483	395,624
Leather	22	4,002	104,810
Other leather goods	41	8,080	129,971
Food and kindred products	**266**	**52,411**	**673,419**
Baking	91	10,234	146,397
Beverages	23	4,182	50,024
Butter	2	60	120
Canning and preserving	30	13,995	222,715
Confectionery	32	8,653	83,851
Flour and grain mills	10	672	18,060
Slaughtering and meat packing	37	8,831	105,874
Sugar refining, cane	3	1,931	14,582
Other	38	3,853	31,796
Tobacco manufactures	**30**	**10,206**	**197,253**
Cigars	22	6,715	180,738
Other	8	3,491	16,515
Paper and printing	**161**	**25,297**	**480,865**
Boxes, paper	31	3,906	61,647
Paper and pulp	17	1,998	24,983
Printing and publishing:			
Book and job	27	3,345	173,138
Newspapers and periodicals	35	7,838	104,715
Other	51	8,210	116,382
Chemicals and allied products	**66**	**11,345**	**309,876**
Chemicals	10	490	8,465
Druggists' preparations	8	2,010	18,918
Explosives			[1] 1,350
Fertilizers	5	617	4,351
Paints and varnishes	15	1,500	48,659
Petroleum refining	7	1,836	48,178
Rayon and allied products	2	1,332	115,308
Soap	2	139	1,015
Other	17	3,421	63,632
Rubber products	**39**	**53,829**	**673,719**
Rubber tires and inner tubes	10	44,514	526,136
Other rubber goods	29	9,315	147,583
Miscellaneous manufacturing	**194**	**39,352**	**628,279**
Electric light, power, and manufactured gas	9	2,719	20,679
Broom and brush	9	841	11,490
Furriers and fur factories	12	4,753	95,062
Other	164	31,039	501,048
Extraction of minerals	**111**	**162,645**	**2,617,559**
Coal mining, anthracite	32	59,600	606,656
Coal mining, bituminous	54	99,253	1,924,951
Metalliferous mining	9	2,049	33,783
Quarrying and nonmetallic mining	9	743	41,776
Crude-petroleum producing	5	915	8,540
Other	2	85	1,853
Transportation and communication	**370**	**135,489**	**1,868,974**
Water transportation	147	36,447	1,181,413
Motortruck transportation	130	76,491	390,866
Motorbus transportation	23	2,701	30,131
Taxicabs and miscellaneous	39	15,689	206,289
Electric railroad	4	1,206	25,414
Steam railroad	6	1,095	26,395
Telephone and telegraph	17	1,423	7,215
Radio broadcasting and transmitting	1	24	48
Other	3	413	1,203

[1] Man-days idle as result of a strike which began in 1936 and continued into 1937.

TABLE 2.—*Strikes in 1937, by Industry*—Continued

Industry	Number of strikes beginning in 1937	Number of workers involved	Man-days idle during 1937
Trade	523	80,107	1,036,574
Wholesale	117	18,833	156,815
Retail	406	61,274	879,759
Domestic and personal service	372	79,047	1,447,465
Hotels, restaurants, and boarding houses	143	21,601	544,422
Personal service, barbers, beauty parlors	29	13,005	86,171
Laundries	110	21,327	524,569
Dyeing, cleaning, and pressing	47	17,294	238,148
Elevator and maintenance workers (when not attached to specific industry)	39	5,642	50,667
Other	4	178	3,488
Professional service	41	7,431	103,537
Recreation and amusement	27	6,188	86,198
Professional	4	384	4,806
Semiprofessional, attendants, and helpers	10	859	12,583
Building and construction	328	71,906	848,018
Buildings, exclusive of P. W. A.	216	53,323	666,763
All other construction (bridges, docks, etc., and P. W. A. buildings)	112	18,583	181,255
Agriculture and fishing	40	7,713	61,183
Agriculture	28	5,080	32,842
Fishing	12	2,633	28,341
W. P. A., relief, and resettlement projects	65	52,094	307,922
Other nonmanufacturing industries	109	14,774	132,509
General strikes	2	21,700	21,700

States Affected

For the first time in the years for which comparable figures are available, Michigan had more workers involved in strikes during 1937 than any other State. Almost 355,000 workers were involved in strikes in Michigan. Pennsylvania was next with 323,432; New York had 221,391; and Ohio 207,428.

The States with the largest number of strikes were New York (897), Pennsylvania (641), New Jersey (309), Michigan (306), Ohio (298), Massachusetts (277), Illinois (272), and California (259).

TABLE 3.—*Strikes in 1937, by States*

State	Number of strikes beginning in 1937	Workers involved			Man-days idle during 1937	
		Number	Percent of total	Average per strike	Number	Percent of total
All States	[1] 4,740	1,860,621	100.0	393	28,424,857	100.0
Alabama	50	24,745	1.3	495	547,029	1.9
Arizona	3	157	(2)	52	1,090	(2)
Arkansas	15	4,799	.3	320	118,789	.4
California	259	79,314	4.3	306	1,940,979	6.8
Colorado	17	1,407	.1	83	36,002	.1
Connecticut	93	18,491	1.0	199	268,160	.9
Delaware	12	1,118	.1	93	13,741	(2)
District of Columbia	27	4,282	.2	159	35,760	.1
Florida	28	7,808	.4	279	57,064	.2
Georgia	17	5,696	.3	335	133,513	.5

See footnotes at end of table.

TABLE 3.—*Strikes in 1937, by States*—Continued

State	Number of strikes beginning in 1937	Workers involved			Man-days idle during 1937	
		Number	Percent of total	Average per strike	Number	Percent of total
Idaho	6	1,088	0.1	181	26,566	0.1
Illinois	272	99,355	5.3	365	1,434,863	5.0
Indiana	138	56,430	3.0	409	967,851	3.4
Iowa	47	15,457	.8	329	332,482	1.2
Kansas	16	1,633	.1	102	15,404	.1
Kentucky	66	23,692	1.3	359	384,373	1.4
Louisiana	23	2,105	.1	92	32,295	.1
Maine	16	5,302	.3	331	216,508	.8
Maryland	44	12,645	.7	287	190,161	.7
Massachusetts	277	55,360	3.0	200	602,037	2.1
Michigan	306	354,499	19.1	1,158	3,924,752	13.8
Minnesota	75	24,731	1.3	330	509,726	1.8
Mississippi	8	2,152	.1	269	49,974	.2
Missouri	142	43,753	2.4	308	965,339	3.4
Montana	13	3,315	.2	255	32,905	.1
Nebraska	10	4,352	.2	435	47,455	.2
Nevada	3	139	[2]	46	596	[2]
New Hampshire	12	1,984	.1	165	26,628	.1
New Jersey	309	65,783	3.5	213	935,054	3.3
New York	897	221,391	11.9	247	3,180,741	11.2
North Carolina	29	7,436	.4	256	85,524	.3
North Dakota	15	772	[2]	51	9,194	[2]
Ohio	298	207,428	11.1	696	3,938,424	13.9
Oklahoma	19	4,055	.2	213	100,479	.4
Oregon	50	12,005	.6	240	423,973	1.5
Pennsylvania	641	323,432	17.4	505	3,695,671	13.0
Rhode Island	93	30,034	1.6	323	292,565	1.0
South Carolina	9	3,319	.2	369	26,632	.1
South Dakota	3	172	[2]	57	1,214	[2]
Tennessee	69	23,490	1.3	340	541,062	1.9
Texas	64	9,608	.5	150	198,491	.7
Utah	14	1,008	.1	72	9,867	[2]
Vermont	6	214	[2]	36	2,583	[2]
Virginia	50	18,743	1.0	375	342,551	1.2
Washington	89	19,736	1.1	222	612,625	2.2
West Virginia	25	6,866	.4	275	201,280	.7
Wisconsin	190	45,037	2.4	237	857,291	3.0
Wyoming	4	309	[2]	77	1,158	[2]
Interstate (unable to determine number of workers in each State)	[1] 5	3,974	.2	795	56,436	.2

[1] The sum of this column is more than 4,740. This is due to the fact that 95 strikes which extended across State lines have been counted, in this table, as separate strikes in each State affected, with the proper allocation of number of workers involved and man-days idle. In 5 additional strikes it was impossible to allocate accurately the workers and man-days to the various States into which the strikes extended.

[2] Less than 1/10 of 1 percent.

In each of 6 States there were more than a million man-days of idleness during the year: Ohio (3,938,000), Michigan (3,925,000), Pennsylvania (3,696,000), New York (3,181,000), California (1,941,000), and Illinois (1,435,000).

Cities Affected

The data on strikes in the cities listed in table 4 do not represent the total incidence of strikes in these cities. The figures given pertain to local strikes only and do not include any of the 304 strikes which extended into 2 or more cities. Except for the 12 cities indicated, all the cities listed were affected by additional strikes extending into

other communities. Data on these intercity strikes are not included because it was not possible to determine accurately how many workers involved in these strikes were employed in each of the cities affected. The cities listed in table 4 which were affected by large intercity strikes were as follows:

Akron, Ohio, by a county-wide strike of W. P. A. workers.
Allentown, Pa., by a silk strike extending into New York, New Jersey, and Pennsylvania.
Boston, Mass., by a State-wide shoe strike.
Buffalo, N. Y., by the steel strike as well as an intercity trucking strike.
Chicago, Ill., by the steel strike.
Cleveland, Ohio, by the General Motors strike as well as the steel strike.
Detroit, Mich., by the General Motors strike as well as an intercity trucking strike.
Easton, Pa., by the general silk strike.
Elizabeth, N. J., by a strike of shirt workers extending into New York, New Jersey, Connecticut, and Pennsylvania.
Flint, Mich., by the General Motors strike as well as an intercity trucking strike.
Lancaster, Pa., by the general silk strike.
Kansas City, Mo., by the General Motors strike.
Lowell, Mass., by a State-wide shoe strike.
Lynn, Mass., by a State-wide shoe strike.
New York, N. Y., by a strike of shipyard workers which also extended into Hoboken, N. J., yards; by a strike of shirt workers extending also into Connecticut, New Jersey, and Pennsylvania; and by a strike of cloak makers extending into northern New Jersey.
Paterson, N. J., by the general silk strike.
Pittsburgh, Pa., by the steel strike as well as the Jones & Laughlin strike which also involved the company's plant in Aliquippa.
Reading, Pa., by a county-wide hosiery strike as well as the general silk strike.
Rochester, N. Y., by an intercity trucking strike.
Saginaw, Mich., by an intercity trucking strike.
Scranton, Pa., by a silk strike extending into New York, New Jersey, and Pennsylvania.
St. Louis, Mo., by the General Motors strike.
Toledo, Ohio, by the General Motors strike.
Wilkes-Barre, Pa., by the general silk strike.
York, Pa., by the general silk strike.

There were 67 cities in the United States which had 10 or more local strikes in 1937. New York, with 614, had more strikes during the year than any 4 other cities. Philadelphia had 192 strikes, Detroit 178, Chicago 110, and Pittsburgh 99. Each of these cities experienced more strikes, by far, in 1937 than in any other year for which information is available.

Although New York had many more strikes than any other city, the number of workers involved in Detroit strikes was greater. Detroit had over 195,000 workers involved in local strikes, as compared with New York's 136,000. Only in these two cities were there as many as a million man-days of idleness because of strikes. In Detroit there were 2,400,000 and in New York 1,749,000.

TABLE 4.—*Strikes in 1937 in Cities Which Had 10 or More Strikes in Any Year from 1927 to 1937* [1]

City	Number of strikes beginning in 1937	Number of workers involved	Man-days idle during 1937
Akron, Ohio	34	50,596	643,722
Allentown, Pa	7	589	6,207
Baltimore, Md	29	7,631	95,859
Birmingham, Ala.[2]	17	2,573	51,149
Boston, Mass	46	9,644	71,337
Buffalo, N. Y	28	6,830	199,890
Chattanooga, Tenn.[2]	15	2,970	49,420
Chicago, Ill	110	31,749	452,803
Cincinnati, Ohio	25	3,422	51,685
Cleveland, Ohio	64	20,531	259,693
Columbus, Ohio [2]	13	1,145	7,680
Denver, Colo	11	1,203	34,316
Des Moines, Iowa [2]	27	2,015	36,500
Detroit, Mich	178	195,478	2,400,130
Duluth, Minn	17	2,254	66,662
Easton, Pa	6	1,529	44,743
East St. Louis, Ill	17	5,110	18,204
Elizabeth, N. J	12	1,717	42,847
Erie, Pa.[2]	17	3,863	56,808
Evansville, Ind.[2]	12	1,303	21,077
Fall River, Mass	11	1,693	17,807
Flint, Mich	10	28,719	54,162
Haverhill, Mass	13	1,060	9,285
Houston, Tex	28	3,217	98,989
Indianapolis, Ind	25	6,165	34,000
Jersey City, N. J	29	3,406	54,216
Kansas City, Mo	37	10,747	355,666
Lancaster, Pa	10	1,767	9,053
Los Angeles, Calif	78	20,544	264,778
Louisville, Ky	22	3,363	48,794
Lowell, Mass	26	5,687	91,629
Lynn, Mass	5	270	5,211
Memphis, Tenn	17	2,207	12,639
Milwaukee, Wis	76	14,079	224,969
Minneapolis, Minn	25	4,771	53,132
Newark, N. J	54	11,623	239,762
New Bedford, Mass	10	2,738	30,234
New Haven, Conn	10	949	26,740
New York (Greater)	614	136,096	1,749,432
Norfolk, Va	10	764	14,691
Paducah, Ky	10	1,816	17,085
Passaic, N. J	13	1,036	12,766
Paterson, N. J	12	4,869	36,753
Pawtucket, R. I	17	3,361	51,963
Peoria, Ill.[2]	17	4,768	67,862
Philadelphia, Pa	192	82,575	928,762
Pittsburgh, Pa	99	19,396	197,901
Portland, Oreg	23	4,636	228,788
Providence, R. I	34	15,824	116,993
Reading, Pa	13	3,822	103,991
Richmond, Va	10	1,347	10,780
Rochester, N. Y	33	5,520	89,397
Rockford, Ill.[2]	11	2,750	39,208
Saginaw, Mich	21	24,877	96,444
St. Louis, Mo	66	19,409	343,715
St. Paul, Minn	11	3,464	111,402
San Francisco (Bay area)	65	26,872	719,867
Scranton, Pa	11	1,049	8,545
Seattle, Wash	32	4,200	74,919
South Bend, Ind.[2]	18	8,072	35,908
Springfield, Ill	12	1,962	84,015
Springfield, Mass	19	1,521	15,993
Terre Haute, Ind.[2]	4	459	3,632
Toledo, Ohio	44	11,642	171,758
Trenton, N. J.[2]	18	3,734	58,570
Washington, D. C	25	3,737	32,855

[1] The figures include local strikes only and do not include strikes which extended into several communities. It was not possible accurately to determine how many workers involved in these strikes were employed in each of the cities affected, hence the figures in this table are exclusive of intercity strikes.

[2] Data for this city are complete since the city was not affected by any intercity strikes.

TABLE 4.—*Strikes in 1937 in Cities Which Had 10 or More Strikes in Any Year from 1927 to 1937*—Continued

City	Number of strikes beginning in 1937	Number of workers involved	Man-days idle during 1937
Waterbury, Conn	14	1,168	13,599
Wausau, Wis.[2]	10	1,207	27,482
Wilkes-Barre, Pa	11	1,176	19,313
Woonsocket, R. I	11	2,368	71,804
Worcester, Mass	21	2,418	42,054
York, Pa	4	145	2,072

[2] Data for this city are complete since the city was not affected by any intercity strikes.

Number of Workers

Half of the 1937 strikes involved fewer than 80 workers. The largest proportion of strikes (38.5 percent) involved between 20 and 100 workers. The average number of workers involved in the 4,740 strikes beginning in 1937 was 393. The largest strikes, on the average, were in the transportation-equipment industries where the average number of workers involved was 2,257 per strike. This was due principally to the large strikes in the automobile industry. The smallest strikes, on the average, were in retail and wholesale trade where an average of 153 workers per strike were involved.

There were 26 strikes during the year which involved 10,000 or more workers each. These are shown in table 5.

TABLE 5.—*Strikes in 1937 Which Involved 10,000 or More Workers Each*

Kind of strike and location	Month strike began	Approximate number of workers involved
General Motors Corporation, 6 States	Jan	48,000
B. F. Goodrich Co., Akron, Ohio	Jan	10,000
Shirt workers, New York, New Jersey, Connecticut, and Pennsylvania	Feb	12,000
Shoe workers, Massachusetts	Feb	11,500
Firestone Tire & Rubber Co., Akron, Ohio	Mar	10,500
Chrysler Corporation, Detroit, Mich	Mar	63,000
Hudson Motor Car Corporation, Detroit, Mich	Mar	10,000
General Motors Corporation plants, Flint, Mich	Mar	13,000
General Motors Corporation plants, Flint, Mich	Apr	14,000
Caterpillar Tractor Co., Peoria, Ill	Apr	10,900
Coal miners, Alabama	Apr	15,000
Jones & Laughlin Steel Corporation, Pennsylvania	May	25,000
4 independent steel companies, 7 States	May	90,000
Anthracite miners, Pennsylvania	May	15,000
Shipyard workers, New York and New Jersey	June	15,000
General strike, Lansing, Mich	June	15,000
Coal miners, captive mines, Pennsylvania and West Virginia	June	10,000
General Motors Corporation (Fernstedt plants), Detroit, Mich	June	10,900
Cloak makers, New York and New Jersey	July	12,000
Truck drivers, Philadelphia, Pa	July	20,000
Coal miners, Illinois	July	16,000
Silk workers, Pennsylvania, New Jersey, and New York	Aug	31,000
Chrysler Corporation (Plymouth plant), Detroit, Mich	Aug	10,300
Painters, New York City	Aug	13,000
Hudson Motor Car Corporation, Detroit, Mich	Nov	10,500
Goodyear Tire & Rubber Co., Akron, Ohio	Nov	13,500

The number of strikes in the various industry groups, classified by number of workers involved, are shown in table 6.

TABLE 6.—*Strikes Beginning in 1937, by Number of Workers Involved and Industry Groups*

Industry group	Total	Average number of workers per strike	Number of strikes in which the number of workers involved was—							
			6 and under 20	20 and under 100	100 and under 250	250 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10 000 and over
All industries:										
Number	4,740	393	751	1,822	1,023	539	314	230	35	26
Percent	100.0		15.8	38.5	21.6	11.4	6.6	4.9	0.7	0.5
Manufacturing										
Iron and steel and their products, not including machinery	226	823	20	72	63	40	21	6	2	2
Machinery, not including transportation equipment	261	351	22	83	76	38	26	14	1	1
Transportation equipment	165	2,257	9	25	22	19	32	39	10	9
Nonferrous metals and their products	117	248	10	44	37	13	9	4	------	------
Lumber and allied products	326	236	32	131	92	41	16	14	------	------
Stone, clay, and glass products	106	228	10	48	29	9	6	3	1	------
Textiles and their products	680	333	70	286	153	87	53	27	1	3
Leather and its manufactures	142	293	8	52	42	27	9	3	------	1
Food and kindred products	266	199	56	101	55	29	15	10	------	------
Tobacco manufactures	30	340	3	5	11	6	3	2	------	------
Paper and printing	161	157	30	70	35	17	5	4	------	------
Chemicals and allied products	66	172	9	31	17	2	4	3	------	------
Rubber products	39	1,380	1	10	10	5	3	6	1	3
Miscellaneous manufacturing	194	203	33	70	49	24	13	5	------	------
Nonmanufacturing										
Extraction of minerals	111	1,465	6	20	22	20	15	16	8	4
Transportation and communication	370	366	70	163	59	39	14	20	4	1
Trade	523	153	150	218	82	44	14	14	1	------
Domestic and personal service	372	212	88	158	60	26	20	20	------	------
Professional service	41	181	14	13	8	4	1	1	------	------
Building and construction	328	219	65	146	55	27	26	7	1	1
Agriculture and fishing	40	193	7	12	12	4	4	1	------	------
W. P. A., relief, and resettlement projects	65	801	7	19	16	9	2	8	4	------
Other nonmanufacturing industries	109	136	31	45	18	9	3	3	------	------
General	2	10,850	------	------	------	------	------	------	1	1

Number of Establishments Involved

About 71 percent of the strikes ending in 1937 were confined to single establishments. About one-third of the total number of workers involved were in these "one establishment" strikes and they accounted for a little more than one-fourth of the man-days of idleness resulting from all strikes.

Only about 9 percent of the strikes extended to more than 10 establishments, but these strikes involved more than 39 percent of the total workers and accounted for more than 44 percent of the man-days idle resulting from all strikes ending during the year.

TABLE 7.—*Strikes Ending in 1937, by Number of Establishments Involved*

Number of establishments involved	Strikes		Workers involved		Man-days idle	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total	4,720	100.0	1,945,745	100.0	30,848,394	100.0
1	3,355	71.1	651,968	33.5	8,773,855	28.4
2 to 5	738	15.6	364,120	18.7	5,102,034	16.5
6 to 10	186	3.9	162,268	8.3	3,288,254	10.7
11 and over	428	9.1	760,384	39.1	13,654,142	44.3
Not reported	13	.3	7,005	.4	30,109	.1

Sex of Workers

In 53.7 percent of the 4,720 strikes which ended during the year, only men were involved, and in 3.3 percent only women were affected. Both men and women were involved in 41.6 percent. The sex of the workers involved in 1.4 percent of the strikes was not reported.

Of the 1,945,745 workers involved in the strikes ending in the year, 80.4 percent were men and 14.1 percent were women. No information is available in the case of 5.5 percent of the workers. During the 10-year period previous to 1937, about 73 percent of all workers involved in strikes were men. The higher proportion of men in 1937 is due largely to the several automobile strikes and the steel strike.

Duration of Strikes

Nearly 37 percent of the strikes, involving 34 percent of the workers, lasted less than 1 week. The average duration of all strikes ending in 1937 was 20.3 calendar days. Only 7 percent of the strikes, involving 14 percent of the total workers, lasted 2 months or longer. These strikes accounted for 41 percent of all the man-days idle during strikes.

TABLE 8.—*Duration of Strikes Ending in 1937*

Duration of strikes	Strikes		Workers involved		Man-days idle	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total	4,720	100.0	1,945,745	100.0	30,848,394	100.0
Less than 1 week	1,728	36.6	663,171	34.0	1,598,730	5.2
1 week and less than ½ month	1,067	22.6	322,213	16.6	2,244,198	7.3
½ and less than 1 month	915	19.4	327,303	16.8	4,572,042	14.8
1 and less than 2 months	675	14.3	361,103	18.6	9,814,060	31.8
2 and less than 3 months	195	4.1	187,996	9.7	6,338,859	20.5
3 months or more	140	3.0	83,959	4.3	6,280,505	20.4

Labor Organizations Involved

American Federation of Labor unions were involved in 49 percent of the strikes ending during 1937. In 39 percent of the strikes, unions affiliated with the Committee for Industrial Organization were involved. However, twice as many workers were involved in these C. I. O. strikes as in the A. F. of L. strikes. The greater number of workers in the C. I. O. strikes was largely due to their organization drives in the mass-production industries such as automobile, rubber, and steel.

In 2½ percent of the strikes, unions were involved which were not affiliated with either the A. F. of L. or the C. I. O. Of these, 37 were strikes on relief projects conducted by the Workers Alliance; in 16 the Mechanics Educational Society of America was involved; the Organized Furniture Workers of Jamestown, N. Y., was involved in seven strikes in that city; and the Independent Textile Union

in seven strikes in the State of Rhode Island. Some of the remaining strikes in this group were conducted by independent unions which later affiliated with the A. F. of L. or the C. I. O.

Less than 3 percent of the strikes were due to disputes between rival unions.[2] The largest of these was the 1-day stoppage of several thousand A. F. of L. teamsters and truck drivers in Philadelphia, in July, in protest against activities of the C. I. O. in organizing bakery workers. Another was the dispute between A. F. of L. teamsters and C. I. O. longshoremen in San Francisco in September.

The labor organizations indicated in table 9 did not in all cases officially call the strikes. Some were started without the formality of a union vote or sanction of a proper union official. However, most of the workers responsible for the strikes were union members, and after the workers were out the unions assisted in negotiating settlements. In a few cases unorganized workers struck and some union later stepped in and offered leadership and assistance in carrying on the strike and in effecting a settlement.

The few strikes (16) called by company unions involved only three-tenths of 1 percent of the total workers. A company union is defined by the Bureau as an organization of workers confined to a particular plant or company and having for its purpose the representation of employees in their dealings with management. In other words, a workers' organization extending beyond the employees of a single company but not connected with a national federation is classified as an unaffiliated union.

The 294 strikes in which no labor organization was involved included 2 percent of the total workers involved in all strikes. In many of these situations a strike committee of employees was active but there was no evidence that there had been an employees' organization previous to the strike or that the strike committee developed into a permanent organization.

TABLE 9.—*Strikes Ending in 1937 by Types of Labor Organizations Involved*

Labor organization involved	Strikes		Workers involved		Man-days idle	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total	4,720	100.0	1,945,745	100.0	30,848,394	100.0
American Federation of Labor	2,301	48.7	583,063	30.0	10,868,485	35.2
Committee for Industrial Organization	1,825	38.7	1,163,515	59.8	18,439,896	59.8
Railroad brotherhoods	4	.1	1,654	.1	29,306	.1
Unaffiliated	118	2.5	87,032	4.5	642,652	2.1
2 rival unions	122	2.6	60,803	3.1	451,653	1.5
Company unions	16	.3	6,023	.3	35,361	.1
Organization involved but type not reported	23	.5	954	(1)	11,028	(1)
No organization	294	6.2	41,716	2.1	363,117	1.2
Not reported as to whether or not any organization was involved	17	.4	985	.1	6,896	(1)

[1] Less than 1/10 of 1 percent.

[2] This does not include jurisdictional strikes or strikes between factions within the union. (See table 10.) Such disputes are classified under the appropriate A. F. of L., C. I. O., or unaffiliated union.

Causes of Strikes

About 58 percent of the strikes in 1937 were principally over union-organization issues. Nearly 60 percent of the total workers involved were in these union-organization disputes, and 76 percent of the total man-days idle resulted from them. Other matters also were involved in these strikes but the union-organization issues seemed to be of major importance.

Wages and hours were the major issues in about 30 percent of the strikes. Twenty-two percent of the workers were in these wage and hour disputes and about 16 percent of the total man-days idle resulted from them.

In 12 percent of the strikes, involving 18 percent of the workers and resulting in 8 percent of the total man-days idle, the major issues were miscellaneous matters, including sympathy and union rivalry strikes, jurisdictional questions, as well as specific grievances over working conditions and rules.

TABLE 10.—*Major Issues Involved in Strikes Ending in 1937*

Major issues	Strikes		Workers involved		Man-days idle	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
All issues	4,720	100.0	1,945,745	100.0	30,848,394	100.0
Wages and hours	1,410	29.9	435,568	22.4	4,835,573	15.7
Wage increase	898	19.0	325,514	16.7	3,457,942	11.2
Wage decrease	63	1.3	21,570	1.1	413,312	1.3
Wage increase, hour decrease	419	8.9	78,901	4.1	916,631	3.0
Wage decrease, hour increase	3	.1	88	(1)	352	(1)
Hour increase	1	(1)	21	(1)	21	(1)
Hour decrease	26	.6	9,474	.5	47,315	.2
Union organization	2,728	57.8	1,163,197	59.8	23,580,248	76.4
Recognition	453	9.6	351,716	18.1	7,239,730	23.5
Recognition and wages	680	14.4	188,027	9.7	3,753,891	12.2
Recognition and hours	9	.2	1,379	.1	55,586	.2
Recognition, wages, and hours	1,058	22.4	400,680	20.5	9,602,680	31.1
Closed shop	331	7.0	119,979	6.2	2,103,860	6.8
Discrimination	131	2.8	52,799	2.7	568,873	1.8
Other	66	1.4	48,617	2.5	255,628	.8
Miscellaneous	582	12.3	346,980	17.8	2,432,573	7.9
Sympathy	41	.9	58,666	3.0	462,715	1.5
Rival unions or factions	125	2.6	81,343	4.2	647,629	2.1
Jurisdiction	54	1.1	6,013	.3	90,026	.3
Other	358	7.6	200,029	10.3	1,229,998	4.0
Not reported	4	.1	929	(1)	2,205	(1)

[1] Less than 1/10 of 1 percent.

Results

In any statistical analysis made soon after the strikes occur, the results must necessarily be evaluated in terms of the demands made or issues involved when the strikes were called. In other words, the basis for judging the outcome of a strike is necessarily the apparent gain or loss to the workers at the close of the strike, since it is im-

possible to keep in touch with each situation to determine what bearing the strike has on later developments.

Such interpretation may be misleading in the light of later developments. For example, a strike may come to a close with the workers obtaining none of the things demanded. Yet the experience of the strike may influence the employer to effect certain improvements in order to avoid another strike. On the other hand, an apparently successful strike may be the cause in later months of an employer's decision to close his place of business or move to another locality. A decision made or action taken by the National Labor Relations Board several months after a strike is closed may change the influence or effect of the strike.

Table 11 indicates that the workers in 46 percent of the strikes ending in 1937 were successful in obtaining substantially all their demands at the close of the strikes. In 32 percent they obtained compromise settlements and in 17 percent they gained little or nothing. The proportions of workers involved and the resulting man-days idle were almost the same as the proportions of strikes in the three categories.

TABLE 11.—*Results of Strikes Ending in 1937*

Result	Strikes		Workers involved		Man-days idle	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total	4,720	100.0	1,945,745	100.0	30,848,394	100.0
Substantial gains to workers	2,191	46.4	903,965	46.4	13,964,768	45.2
Partial gains or compromises	1,503	31.8	605,823	31.1	9,346,245	30.3
Little or no gains to workers	815	17.3	302,758	15.6	6,714,054	21.8
Jurisdiction, rival unions, or factions	179	3.8	87,356	4.5	737,655	2.4
Indeterminate	24	.5	44,129	2.3	68,528	.2
Not reported	8	.2	1,714	.1	17,144	.1

Table 12 indicates that about the same proportion of the wage and hour strikes (48.1 percent) succeeded as did the strikes over union organization (49.6 percent). However, a slightly greater proportion (18.0 percent) of the union-organization strikes resulted in little or no gains than did the strikes primarily concerned with wages and hours (14.7 percent).

Of the workers involved in the wage and hour strikes, 46 percent were successful, 40 percent obtained compromise settlements, and 10 percent gained little or nothing, whereas 52 percent of the workers involved in the union-organization strikes won their demands, 30 percent obtained compromise settlements, and 18 percent gained little or nothing.

TABLE 12.—*Results of Strikes Ending in 1937 in Relation to Major Issues Involved*

Major issues	Total		Strikes resulting in—					
			Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeterminate	Not reported
	Number	Percent	Percent of strikes					
All issues	4,720	100.0	46.4	31.8	17.3	3.8	0.5	0.2
Wages and hours	1,410	100.0	48.1	36.7	14.7	----	.1	.4
Wage increase	898	100.0	46.8	37.2	15.5	----	.1	.4
Wage decrease	63	100.0	41.3	34.9	23.8	----	----	----
Wage increase, hour decrease	419	100.0	51.9	37.7	10.0	----	.2	.2
Wage decrease, hour increase	3	100.0	66.7	----	33.3	----	----	----
Hour increase	1	100.0	----	----	100.0	----	----	----
Hour decrease	26	100.0	46.2	15.4	34.6	----	----	3.8
Union organization	2,728	100.0	49.6	32.2	18.0	----	.2	(1)
Recognition	453	100.0	44.4	18.8	36.4	----	.4	----
Recognition and wages	680	100.0	51.2	34.6	14.0	----	.1	.1
Recognition and hours	9	100.0	33.3	44.5	22.2	----	----	----
Recognition, wages, and hours	1,058	100.0	54.3	34.2	11.5	----	----	----
Closed shop	331	100.0	42.0	39.3	18.7	----	----	----
Discrimination	131	100.0	38.1	33.6	27.5	----	.8	----
Other	66	100.0	54.5	28.8	15.2	----	1.5	----
Miscellaneous	582	100.0	28.0	18.2	19.9	30.8	2.9	.2
Sympathy	41	100.0	26.8	19.5	24.4	----	29.3	----
Rival unions or factions	125	100.0	----	----	----	100.0	----	----
Jurisdiction	54	100.0	----	----	----	100.0	----	----
Other	358	100.0	42.4	27.4	28.8	----	1.4	----
Not reported	4	100.0	----	----	75.0	----	----	25.0
			Percent of workers involved					
All issues	1,945,745	100.0	46.4	31.1	15.6	4.5	2.3	0.1
Wages and hours	435,568	100.0	46.4	40.4	10.1	----	3.0	.1
Wage increase	325,514	100.0	49.2	37.5	9.2	----	4.0	.1
Wage decrease	21,570	100.0	24.8	65.2	10.0	----	----	----
Wage increase, hour decrease	78,901	100.0	43.4	49.7	6.8	----	(1)	.1
Wage decrease, hour increase	88	100.0	31.8	----	68.2	----	----	----
Hour increase	21	100.0	----	----	100.0	----	----	----
Hour decrease	9,474	100.0	21.9	8.1	69.6	----	----	.4
Union organization	1,163,197	100.0	51.6	30.4	17.8	----	.1	.1
Recognition	351,716	100.0	59.0	6.7	34.2	----	.1	----
Recognition and wages	188,027	100.0	38.0	52.7	8.7	----	.1	.5
Recognition and hours	1,379	100.0	23.0	55.2	21.8	----	----	----
Recognition, wages, and hours	400,680	100.0	64.0	28.8	7.2	----	----	----
Closed shop	119,979	100.0	19.4	52.7	27.9	----	----	----
Discrimination	52,799	100.0	29.8	56.7	12.7	----	.8	----
Other	48,617	100.0	53.2	43.6	1.5	----	1.7	----
Miscellaneous	346,980	100.0	29.1	22.0	15.1	25.2	8.5	.1
Sympathy	58,666	100.0	27.2	2.4	24.5	----	45.9	----
Rival unions or factions	81,343	100.0	----	----	----	100.0	----	----
Jurisdiction	6,013	100.0	----	----	----	100.0	----	----
Other	200,029	100.0	42.7	37.4	18.6	----	1.3	----
Not reported	929	100.0	----	----	66.3	----	----	33.7

[1] Less than 1/10 of 1 percent.

Methods of Negotiating Settlements

Forty-five percent of the strikes ending in 1937 were settled through negotiations between employers and representatives of organized workers with no outside assistance. About 39 percent of the total workers involved were in these strikes, but only 25 percent of the total

man-days idle. Thirty-six percent of the strikes, including 42 percent of the workers and accounting for 53 percent of the total man-days idle, were settled with the assistance of Government conciliators or labor boards. In most of these cases the strikers were represented by union officials. Private conciliators or arbitrators were instrumental in negotiating settlements of 2.5 percent of the strikes, involving about 4 percent of the total workers and accounting for 2.6 percent of the total man-days idle.

Nearly 13 percent of the strikes, involving a similar proportion of workers and accounting for 18.5 percent of the total man-days idle, were terminated without formal settlements. Nearly all of these strikes were lost when the strikers returned to work without settlements, or when the employers hired new workers to fill their places, moved, or discontinued business entirely.

Of the 1,697 strikes which were settled with the assistance of Government conciliators and labor boards, 1,659 were settled by conciliation methods and 38 by arbitration. Of the 116 strikes where private conciliators or arbitrators assisted in reaching settlements, conciliation methods were used in the case of 83 and arbitration in 33. Of the total 4,720 strikes ending during the year, 71 were terminated when both parties agreed to submit the issues to arbitration.

TABLE 13.—*Methods of Negotiating Settlements of Strikes Ending in 1937*

Negotiations toward settlements carried on by—	Strikes		Workers involved		Man-days idle	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total	4,720	100.0	1,945,745	100.0	30,848,394	100.0
Employers and workers directly	171	3.6	27,649	1.4	221,113	.7
Employers and representatives of organized workers directly	2,125	45.0	755,473	38.8	7,820,047	25.3
Government conciliators or labor boards	1,697	36.0	823,982	42.3	16,293,148	52.9
Private conciliators or arbitrators	116	2.5	74,931	3.9	813,464	2.6
Terminated without formal settlement	611	12.9	263,710	13.6	5,700,622	18.5

ACTIVITIES OF UNITED STATES CONCILIATION SERVICE, MARCH 1938

THE United States Conciliation Service, during March 1938, disposed of 411 situations involving 120,599 workers. These matters were referred to the Service by employees and employers in accordance with the organic act establishing the Department of Labor, which gave the Secretary of Labor the power to act as mediator and to appoint commissioners of conciliation in labor disputes whenever in the Secretary's judgment the interest of industrial peace required it to be done.

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Labor disputes such as strikes, threatened strikes, lock-outs, and controversies accounted for 129 of these situations, involving 93,711 workers. The remaining 288 situations, involving 26,888 workers, were services rendered by the Conciliation Service which heretofore have not been reported. These matters consist of arbitrations, conferences regarding labor problems, technical advice, information relating to labor conditions, and the adjustment of general or miscellaneous complaints.

The facilities of the Conciliation Service during this period were utilized by employees and employers in 42 States, the District of Columbia, Alaska, and the Virgin Islands (table 1).

The Service made its good offices available in the fields of agriculture, building trades, maritime, textiles, transportation, and others as shown in table 2.

TABLE 1.—*Situations Disposed of by United States Conciliation Service, March 1938, Classified by States*

State	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
United States	129	93,711	282	26,888	411	120,599
Alabama	4	727	12	1,647	16	2,374
Alaska			1	1	1	1
Arizona	2	409	1	1	3	410
California	6	8,980	16	19	22	8,999
Colorado			6	19	6	19
Connecticut			1	1	1	1
Delaware			1	1	1	1
District of Columbia	5	535	40	95	45	630
Florida			3	3	3	3
Georgia	1	65	7	2,206	8	2,271
Idaho			3	8	3	8
Illinois	7	2,333	22	31	29	2,364
Indiana	7	1,594	9	9	16	1,603
Iowa	2	61	1	6	3	67
Kansas			1	1	1	1
Kentucky			2	2	2	2
Louisiana			3	5	3	5
Maine			1	1	1	1
Maryland	5	1,415	3	10	8	1,425
Massachusetts	6	2,551	5	5	11	2,556
Michigan	2	268	4	10	6	278
Minnesota			3	7	3	7
Mississippi			4	802	4	802
Missouri	10	4,534	4	115	14	4,649
Montana			3	8	3	8
Nebraska			3	16	3	16
New Jersey	7	3,458	8	2,168	15	5,626
New York	9	15,857	43	14,500	52	30,357
North Carolina			5	104	5	104
Ohio	11	3,529	17	34	28	3,563
Oklahoma	1	35	1	1	2	36
Oregon			4	4	4	4
Pennsylvania	19	11,646	15	2,937	34	14,583
Rhode Island	2	413	2	271	4	684
South Carolina			4	603	4	603
South Dakota	1	2,450	1	1	2	2,451
Tennessee	8	3,476	3	3	11	3,479
Texas	1	12,000	4	752	5	12,752
Utah			1	3	1	3
Vermont			1	427	1	427
Virginia	5	206	4	13	9	219
Washington	4	78	5	9	9	87
West Virginia			1	1	1	1
Wisconsin	3	1,091	4	28	7	1,119
Virgin Islands	1	16,000			1	16,000

TABLE 2.—*Situations Disposed of by United States Conciliation Service, March 1938, Classified by Industries*

Industry	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries	129	93,711	282	26,888	411	120,599
Paper and printing	4	363	6	809	10	1,172
Machinery	9	5,872	3	429	12	6,301
Textiles	15	11,084	53	23,161	68	34,245
Food	9	16,169	21	728	30	16,897
Building trades	22	2,775	24	138	46	2,913
Domestic and personal services	7	1,071	2	15	9	1,086
Iron and steel	5	3,400	8	15	13	3,415
Maritime	3	4,067	6	6	9	4,073
Lumber and furniture	3	440	1	1	4	441
Transportation	5	3,890	26	26	31	3,916
Transportation equipment	2	3,210			2	3,210
Trade	9	649	6	458	15	1,107
Leather	4	1,570	2	11	6	1,581
Rubber	2	1,361	2	427	4	1,788
Mining			1	1	1	1
Automotive	7	538	5	12	12	550
Chemical	1	8	1	270	2	278
Utilities			1	1	1	1
Nonferrous metals	4	772			4	772
Stone—clay—glass	6	1,855	4	4	10	1,859
Professional services	5	1,191	4	90	9	1,281
Communications	2	15,016	1	1	3	15,017
Moving picture			2	2	2	2
Tobacco	1	2,150	5	18	6	2,168
Agriculture	3	16,250	19	97	22	16,347
Unclassified	1	10	79	168	80	178

Labor Turn-Over

LABOR TURN-OVER IN MANUFACTURING, FEBRUARY 1938

THERE was a sharp decrease in the number of lay-offs in manufacturing plants in February, as indicated by the reports on labor turn-over received by the Bureau of Labor Statistics. The lay-off rate declined to 3.79 per 100 employees in February, less than half as large as in December and about one-third lower than in January. Although the February rate was large in comparison with most of the months in 1937, it represented the lowest lay-off rate since last September. Discharge rates and quit rates continued to be unusually small. The quit rate of 0.49 per 100 employees was the lowest since March 1933. The accession rate at 3.13 per 100 was slightly lower than the January rate of 3.78, but substantially larger than in the last 3 months of 1937.

As compared with February of last year, the discharge and quit rates were considerably lower. The lay-off rate was higher than a year ago and accounted for an increase in total separations from 2.85 to 4.39 per 100 employees. Workers were being hired at the rate of 3.13 per 100, as compared with 4.71 in February 1937.

Total separation rates were lower than in January in 17 of the 20 industries for which individual rates are shown. The accession rates were higher in 8 industries. Compared with February 1937, the number of separations increased in 15 industries. Higher accession rates prevailed in 7.

All Manufacturing

The Bureau of Labor Statistics' survey of labor turn-over covers more than 5,000 representative manufacturing establishments, which in February employed nearly 2,300,000 workers. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 20 industries for which separate rates are shown (see tables 2 and 3) reports were received from representative plants employing at least 25 percent of the workers in each industry.

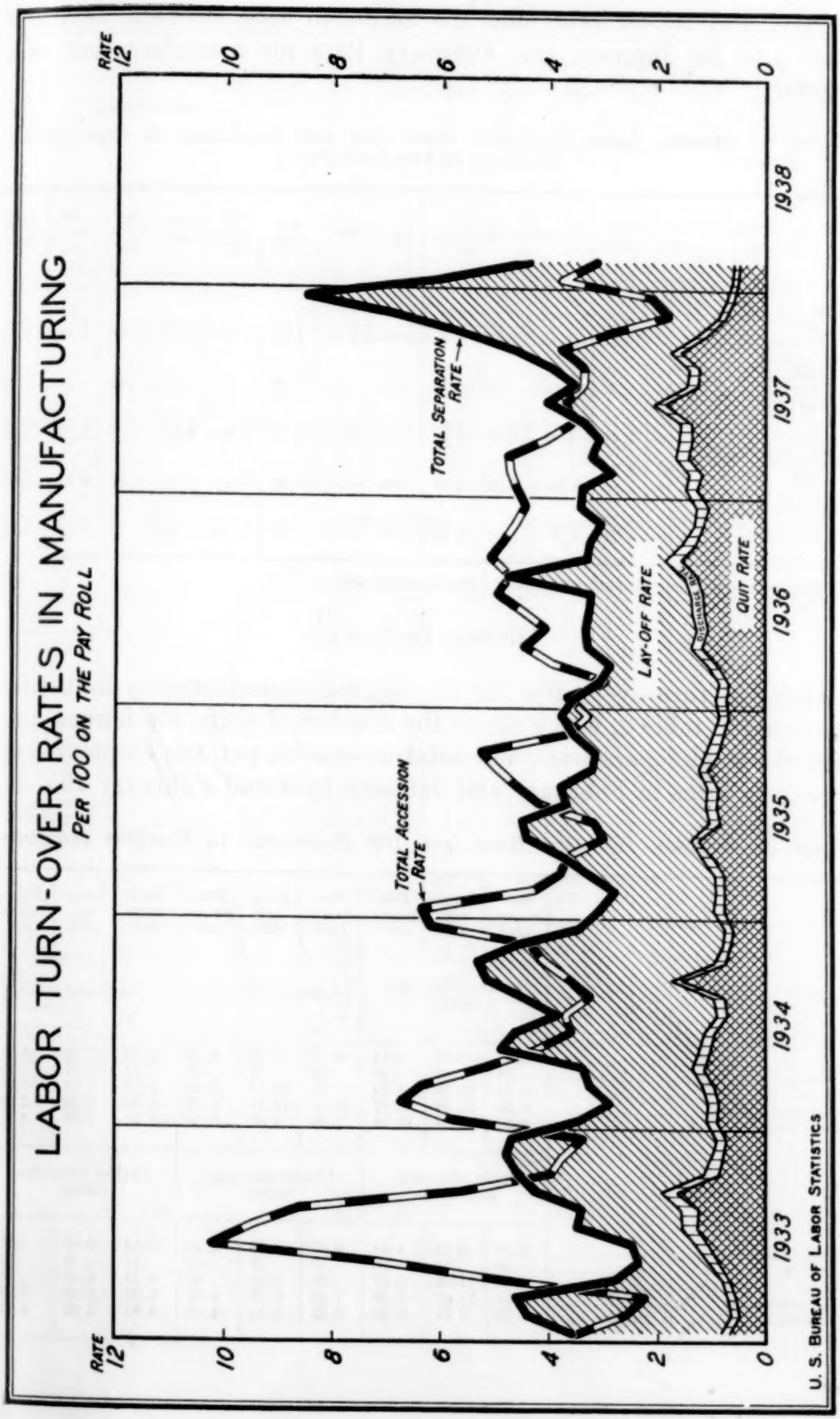
LABOR TURN-OVER RATES IN MANUFACTURING
PER 100 ON THE PAY ROLL
RATE
12
10
8
6
4
2
0
TOTAL ACCESSION RATE
TOTAL SEPARATION RATE
LAY-OFF RATE
QUIT RATE
1933
1934
1935
1936
1937
1938
U. S. BUREAU OF LABOR STATISTICS

Table 1 shows the total separation rate classified into quit, discharge, and lay-off rates and the accession rate for each month of 1937 and for January and February 1938 for manufacturing as a whole.

TABLE 1.—*Monthly Labor Turn-Over Rates (per 100 Employees) in Representative Factories in 144 Industries*

Class of rate and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Quit:													
1938	0.52	0.49											
1937	1.27	1.19	1.43	1.38	1.37	1.89	1.25	1.23	1.59	1.05	0.72	0.60	1.25
Discharge:													
1938	.11	.11											
1937	.21	.22	.24	.23	.21	.19	.21	.19	.19	.19	.16	.14	.20
Lay-off: [1]													
1938	5.45	3.79											
1937	1.90	1.44	1.53	1.48	1.79	1.94	2.06	2.57	2.84	4.45	5.99	7.77	2.98
Total separation:													
1938	6.08	4.39											
1937	3.38	2.85	3.20	3.09	3.37	4.02	3.52	3.99	4.62	5.69	6.87	8.51	4.43
Accession:													
1938	3.78	3.13											
1937	4.60	4.71	4.74	4.04	3.56	3.69	3.36	3.36	3.78	2.84	1.79	2.12	3.55

[1] Including temporary, indeterminate, and permanent lay-offs.

Twenty Industries

Detailed turn-over rates for 20 selected manufacturing industries are listed in table 2, which shows the number of quits, discharges, and lay-offs, total separations, and total accessions per 100 employees in reporting firms in February and January 1938 and February 1937.

TABLE 2.—*Monthly Turn-Over Rates (per 100 Employees) in Specified Industries*

Class of rates	February 1938	January 1938	February 1937	February 1938	January 1938	February 1937	February 1938	January 1938	February 1937
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit	0.47	0.37	1.44	0.32	0.43	4.29	0.60	0.66	1.04
Discharge	.04	.07	.19	.09	.17	.46	.10	.11	.32
Lay-off	6.04	13.50	1.54	11.73	16.71	2.95	1.12	1.48	.99
Total separation	6.55	13.94	3.17	12.14	17.31	7.70	1.82	2.25	2.35
Accession	2.38	2.34	10.23	5.84	4.82	6.69	4.27	7.04	4.07
	Brick, tile, and terra cotta			Cigars and cigarettes			Cotton manufacturing		
Quit	0.50	0.51	1.24	0.89	1.13	3.46	0.84	0.85	1.81
Discharge	.16	.13	.25	.13	.14	.09	.11	.16	.28
Lay-off	8.85	11.05	3.57	.51	6.81	.46	4.14	4.93	.93
Total separation	9.51	11.69	5.06	1.53	8.08	4.01	5.09	5.94	3.02
Accession	6.10	6.79	6.29	6.22	5.15	4.62	3.93	3.92	4.15

TABLE 2.—*Monthly Turn-Over Rates (per 100 Employees) in Specified Industries*—Continued

Class of rates	February 1938	January 1938	February 1937	February 1938	January 1938	February 1937	February 1938	January 1938	February 1937
	Electrical machinery			Foundries and machine shops			Furniture		
Quit	0.54	0.58	0.96	0.43	0.30	1.56	0.59	0.41	1.09
Discharge	.09	.09	.15	.13	.13	.35	.12	.15	.27
Lay-off	5.48	7.17	.46	4.36	6.04	1.05	4.35	8.98	3.46
Total separation	6.11	7.84	1.57	4.92	6.47	2.96	5.06	9.54	4.82
Accession	1.04	1.32	6.34	1.49	1.53	6.86	6.05	6.43	4.34
	Hardware			Iron and steel			Knit goods		
Quit	0.36	0.47	1.84	0.44	0.39	0.99	0.50	0.71	0.75
Discharge	.09	.07	.40	.15	.11	.09	.10	.10	.05
Lay-off	2.19	9.13	1.30	3.23	4.81	.39	2.49	4.31	1.41
Total separation	2.64	9.67	3.54	3.82	5.31	1.47	3.09	5.12	2.21
Accession	.97	1.78	6.08	1.46	1.15	5.04	4.19	2.75	3.09
	Men's clothing			Petroleum refining			Radios and phonographs		
Quit	0.48	0.60	0.94	0.27	0.23	0.64	0.86	0.75	(1)
Discharge	.05	.05	.13	.07	.06	.10	.15	.15	(1)
Lay-off	3.31	2.61	.89	2.22	3.42	1.08	7.47	9.02	(1)
Total separation	3.84	3.26	1.96	2.56	3.71	1.82	8.48	9.92	(1)
Accession	3.90	10.83	3.79	.88	2.05	2.69	3.07	5.41	(1)
	Rayon			Rubber tires			Sawmills		
Quit	0.32	0.58	0.79	0.58	0.53	0.61	0.78	0.88	1.70
Discharge	.33	.14	.17	.02	.04	.08	.24	.14	.26
Lay-off	1.68	6.90	.36	5.60	6.44	.39	3.71	5.76	3.30
Total separation	2.33	7.62	1.32	6.20	7.01	1.08	4.73	6.78	5.26
Accession	6.07	11.99	2.38	1.31	1.19	1.64	6.88	6.72	9.93
	Slaughtering and meat packing			Woolen and worsted goods					
Quit	0.55	0.53	0.95	0.35	0.52	0.94			
Discharge	.15	.16	.25	.04	.06	.12	-------	-------	-------
Lay-off	12.73	5.69	9.92	9.05	7.47	1.64	-------	-------	-------
Total separation	13.43	6.38	11.12	9.44	8.05	2.70	-------	-------	-------
Accession	5.18	10.84	5.95	5.30	7.99	2.51	-------	-------	-------

[1] No data available.

Minimum Wages and Maximum Hours

WAGE DETERMINATIONS FOR WORK ON PUBLIC CONTRACTS, JANUARY 1938

DETERMINATIONS of minimum wages for work performed on Government contracts were made for the manufacture of barrack bags and bandoleers and men's hats and caps during January 1938.[1] In both cases the determinations involved industries for which prevailing wages had already been established.[2] The determination for the manufacture of barrack bags and bandoleers was an extension of that for the cotton garment and allied industries group, and wages of auxiliary workers were provided for in the men's hat and cap industry.

On the basis of facts disclosed at public hearings, the Secretary of Labor determined on January 29 that the minimum wage established for the cotton garment and allied industries should be extended to include the manufacture of barrack bags and bandoleers. Evidence presented showed that the latter products are made from cotton material in plants within the scope of the minimum-wage determination for cotton garments, or in closely similar plants, and that the productive processes and labor requirements are essentially the same. Therefore, effective February 14, the Secretary of Labor ordered that the minimum rate of pay for employees manufacturing barrack bags and bandoleers should be 37.5 cents per hour or $15 per 40-hour week.[2]

Minimum wages in the men's hat and cap industry for workers engaged on public contracts were reconsidered in order to establish the coverage of the industry with respect to one branch and the application of wages. The determination, dated January 24, provided that, effective February 11, the minimum wage for the manufacture or supply of men's hats and caps should be 67.5 cents per hour or $27 per week of 40 hours, as previously fixed, and further that a tolerance of not over 20 percent of the employees in any one factory should be paid not less than 37.5 cents per hour or $15 for a 40-hour week, subject to the provisions of the Public Contracts Act governing auxiliary workers. The term "auxiliary workers" when used in connection with employees in the uniform-cap and in the stitched-

[1] See press releases of Department of Labor, Office of the Secretary, Nos. 217 and 220.
[2] See Monthly Labor Review, September 1937 (p. 694).

hat branches of the industry may not be interpreted to include "cutters or workers in the cutting room, machine workers, or workers on any kind of machine, blockers, pressers, or hand sewers." Hearings held further disclosed that the production of enlisted men's white sailor hats properly belongs within the limits of the earlier determination governing minimum wages in the manufacture of men's hats and caps.

LEGALIZATION OF COLLECTIVE AGREEMENT IN NETHERLAND FOOTWEAR INDUSTRY [1]

A LAW was passed in the Netherlands, which went into force on October 1, 1937, authorizing the Government to declare binding upon a whole industry or branch of industry the terms of voluntary collective agreements already in force in some establishments in the industry. On September 27, 1937, the industrial council for the footwear industry notified the Government that unless the collective agreement in that industry was made binding for the whole industry, under the terms of the new law, the manufacturers would not be willing to renew the agreement upon its termination June 30, 1938.

In its statement to the Government, the council pointed out that the manufacturers signatory to the agreement represented 66 factories, controlled 70 percent of the total production of footwear in the Netherlands, and employed 7,300 workers (some 65 percent of all the workers in the industry). The council stated, however, that the position of the industry was jeopardized by cut-throat competition among manufacturers, occasioned by the lower wages paid by those who refused to sign the collective agreement.

The Government was urged to make its decision before January 1, 1938, as notice of cancelation of the agreement would have to be made by that time. On December 24, 1937, the Minister of Social Affairs, after consultation with the High Council of Labor, ordered that a number of clauses of the existing agreement be made binding upon the entire footwear industry (including any enterprise or part thereof engaged in the manufacture of shoes, boots, and slippers), during the period from January 10, 1938, to June 30, 1938, when the existing agreement will expire. These clauses cover wage rates, classification of workers, night and Sunday work, allowances for children, holidays, and half pay, but do not apply to office staff, foremen, and similar workers. As the law of October 1, 1937, contains a provision prohibiting individual agreements with workers which change any provisions of the general collective agreement, the clause of the voluntary agreement covering this point was not included in the decree of December 24, 1937.

[1] Data are from report of Harold D. Clum, American consul general at Rotterdam, dated January 14, 1938.

The minimum wage rates established in the voluntary collective agreement, now made of general application throughout the industry, were as shown in the following table.

Minimum Wage Rates for Netherland Footwear Workers of Specified Ages

[Average exchange rate of florin (100 Dutch cents) in January 1938=55.7 cents]

Age of worker	Males		Females	
	Hourly rate	Normal weekly rate	Hourly rate	Normal weekly rate
	Cents	*Florins*	*Cents*	*Florins*
15 years	10	4.80	10	4.80
15½ years	12	5.76	12	5.76
16 years	14	6.72	13	6.22
16½ years	17	8.16	14	6.72
17 years	19	9.12	15	7.20
17½ years	21	10.08	16	7.68
18 years	24	11.52	17	8.16
18½ years	26	12.48	18	8.64
19 years	28	13.44	19	9.12
19½ years	30	14.40		
20 years	33	15.84	20	9.60
20½ years	35	16.80	[1] 21	[1] 10.08

[1] Rates apply to workers over 20 years of age.

No wages are established for employees under 15 years of age. Those hired after reaching 15 years have a right to the above rates only after 1 year of employment.

Male workers over 21 and under 60 years of age are divided into three classes, on the basis of the kind of work performed. The minimum rates for these classes are as follows:

	Hourly wage (cents)	*Normal weekly wage (florins)*
Class I	45	21.60
Class II	41	19.68
Class III	37	17.76

Workers of the first and second classes are not entitled to the above wages until they have reached the age of 22, and those of the third class on becoming 21 years of age.

Piece rates must be such that piece workers' earnings exceed the minimum hourly wage by at least 10 percent.

If a factory is working short time the wages for work by the hour, as well as for piece work, must be supplemented so as to amount to 50 percent of the minimum wages per week. The employer, however, retains the right to terminate employment after due notice.

Time and a quarter must be paid for overtime between 6 and 7 a. m. and 7 and 10 p. m.; and time and a half for overtime between 10 p. m. and 6 a. m., except when two shifts are worked. For work on Sundays and official holidays wages are doubled. Eight hours' pay is granted on New Year's Day, Ascension Day, and Christmas, except when they fall on Sundays. At least three consecutive holidays with

pay are granted, preferably in June, July, or August. If Christmas and New Year's Day are Sundays, the number of paid holidays is increased by two, so that the workers will have at least 6 holidays with pay per annum.

Leave of absence with pay, for 1 day or 1½ days, is granted on the occasion of death of a close relative, marriage, or the confinement of a worker's wife.

Compulsory family allowances are provided for, at the rate of 0.75 florin per week for each child under 14 years of age, beginning with the fourth child under 14. Excluded from such allowances are the administrative staff and all those whose remuneration exceeds 2,400 florins per annum. Payment of the allowance is made through the Central Children's Allowance Fund for the Netherland Shoe Industry, to which all employers must contribute a certain percentage (set by the industrial council for the footwear industry) of the total of wages paid to their workers. The system of allowances for children was a voluntary arrangement made by the manufacturers who were parties to the collective agreement, and by being given binding force, now applies to the whole footwear industry.

Wages and Hours of Labor

EARNINGS AND HOURS IN THE AMMUNITION INDUSTRY, OCTOBER 1937 [1]

WAGE EARNERS in the ammunition and related products industry earned on the average 58.7 cents per hour in October 1937. Their average weekly hours were 40.4, which resulted in average earnings of $23.71 per week. These facts are disclosed by a survey of the industry recently made by the Bureau of Labor Statistics.

Scope of Industry and of Study

The Census of Manufactures in 1935 included in the ammunition and related products industry "establishments engaged primarily in the manufacture of ammunition for small arms (not including grenades and bombs), and of blasting and detonating caps." These are private plants, thus excluding the production of ammunition in arsenals and other establishments under the Federal Government. The present survey conformed to this definition of the industry.

In 1935, the Census of Manufactures reported for the industry 13 establishments with a total of 5,599 wage earners. The Bureau of Labor Statistics found 12 plants, which employed 5,823 workers, and all of these were covered by the study. Of the total, 7 plants with 1,758 wage earners made blasting and detonating caps, and 5 establishments with 4,065 employees manufactured small-arms ammunition. These two branches of the industry generally are carried on in separate establishments, the production of blasting caps having been found on a small scale in only one of the ammunition plants. There are, however, a number of processes and occupations which are common to both branches.

The products of small-arms ammunition establishments consist of cartridges, shotgun or loaded paper shells, and blanks. The cartridges used in pistols, revolvers, and rifles are of various types and sizes. They range from .22 to .50 caliber. The loaded paper shells are also of various sizes, chiefly from 20 to 12 gage.

CHARACTERISTICS OF INDUSTRY

Many of the plants in the ammunition and related products industry are integrated with those in other industries, especially explosives.

[1] Prepared by J. Perlman, P. L. Jones, and O. R. Witmer, of the Bureau's Division of Wages, Hours, and Working Conditions, in cooperation with the Division of Public Contracts of the U. S. Department of Labor.

With two exceptions, the establishments manufacturing blasting and detonating caps are related to the explosives industry. This is also true of some plants engaged in the production of small-arms ammunition.

The establishments in this industry are quite well distributed geographically: One in California, three in Connecticut, one in Illinois, one in Minnesota, one in New York, one in New Jersey, one in Ohio, and three in Pennsylvania. Because of the element of hazard involved, all but two of these establishments are located in relatively small towns.

The hazardous nature of the ammunition and related products industry is naturally attributable to the extensive use of explosive powders in its manufactured products. The hazard is largely confined to the mixing of the fulminate and powder and the subsequent charging, loading, assembling, and testing operations. Strict precautions are taken not only to minimize the frequency of explosions in the above processes but also to confine the area of the explosion. To this end, the work is organized in such a manner that hazardous operations are carried on either in separate rooms or widely separated buildings. Moreover, only one operator with the necessary helpers occupies a given room or building, and in certain processes they retire from the place and control the work from behind bullet-proof glass or by means of mirrors. Furthermore, the amount of explosive materials used by each operator at a given time is limited to a relatively small quantity. In addition, the plants enforce precautions of a general nature; thus no equipment is used that will produce sparks, and employees are prohibited from smoking and from carrying matches. Many of these plants are surrounded by large tracts of vacant, fenced-in land and are policed by watchmen.[2]

Seasonal demand plays some part in connection with certain products manufactured by this industry. This is especially true of small-arms ammunition for the hunting season. Thus, loaded paper shells are employed in hunting small game, such as rabbits, squirrels, ducks and other birds, and in trap shooting. Rifle cartridges are employed in hunting larger game, such as deer, bears, foxes, and raccoons. The hunting season is subject to widely different Federal and State regulations, but it generally occurs in the closing months of the year. Blasting and detonating caps are less seasonal in demand, being used in connection with setting off charges of dynamite or blasting powder, especially in mines, quarries, and construction work. The demand for pistol and rifle cartridges for use in target practice as well as by law-enforcement officers and various other individuals is also fairly steady throughout the year. The information obtained in this survey

[2] In a number of places, these and similar precautions are enforced by municipal and State legislation and regulations.

covered the month of October 1937, which is fairly representative of the entire year.

Trade-union organization plays only a small role in the ammunition and related products industry. One establishment had an oral agreement with an affiliated trade-union. Several of the large plants, however, reported the existence of company unions.

Purchases by the Federal Government from establishments engaged in the production of small-arms ammunition are limited, but the Government is interested in the maintenance of these plants, so that they may be utilized in the production of ammunition on a large scale in time of war. There is also an important demand for small-arms ammunition from foreign governments.

NATURE OF DATA COLLECTED

As in other surveys, the information in this was collected by actual visits of field representatives of the Bureau to every plant covered.

In each plant, the field representative obtained from the pay-roll or other records for every employee (except higher supervisory and office workers) data as to his occupation, sex, color, total hours actually worked, and total earnings for one pay-roll period.[3] In addition, there was obtained certain information for the plant, covering such topics as full-time hours, over-time work, methods of wage payment, and employer-employee relations.

Along with the occupational designation of each worker, the field representative secured descriptions of occupations in a limited number of plants. These descriptions were obtained from the foreman or some other person in charge of operations, and in each case he was asked to classify each job as skilled, semiskilled, or unskilled. This information was used in determining the occupational and skill classifications given in this report.

Average Hourly Earnings

METHODS OF WAGE PAYMENT

Of the total number of employees covered, 59.0 percent were paid on a straight time-rate basis, 29.2 percent on a straight piece-rate basis, and 11.8 percent under some production-bonus plan. Time workers were found in each of the plants included, and in all but two they constituted a majority of the wage earners. Piece workers were found in only 5 establishments, in 3 of which they were numerous. Production-bonus plans existed in 8 of the plants, but in 5 of these they covered a relatively small number of the employees.

[3] In case the pay-roll period exceeded 1 week, there were also obtained the total hours actually worked for 1 continuous week within the pay-roll period. This made it possible to compile data on weekly hours and earnings for all establishments.

In 7 of the 12 establishments, overtime, when worked, was paid for at time and one-half to all except a few salaried workers. In four plants, the overtime compensation was on a pro-rata basis, and in one establishment overtime was prohibited altogether.

HOURLY EARNINGS FOR ALL WORKERS

The average hourly earnings of the 5,823 employees covered in the ammunition and related products industry were 58.7 cents in October 1937. This average covers a wide range of individual earnings, from a figure under 27.5 cents to one over $1.25 (table 1).

The distribution shows a tendency for the majority of the employees to concentrate in the lower wage classes. Thus, if 57.5 cents (the figure just below the average) is taken as an upper limit, there are included considerably more than one-half of the total labor force. Within this group, only about 12 percent earned under 42.5 cents, while another 45 percent were concentrated in the relatively narrow spread of 42.5 and less than 57.5 cents. On the other hand, in the remainder of the distribution, the employees are scattered over a fairly wide range of classes, with nearly one-third earning 57.5 and under 77.5 cents, one-tenth 77.5 cents and less than $1, and about 2 percent $1 and over.

TABLE 1.—*Distribution of Ammunition Workers, by Average Hourly Earnings in October 1937*

Average hourly earnings	Number of employees	Simple percentage	Cumulative percentage	Average hourly earnings	Number of employees	Simple percentage	Cumulative percentage
Under 27.5 cents	15	0.3	0.3	67.5 and under 72.5 cents	396	6.8	81.0
27.5 and under 32.5 cents	45	.7	1.0	72.5 and under 77.5 cents	429	7.3	88.3
32.5 and under 37.5 cents	201	3.5	4.5	77.5 and under 82.5 cents	206	3.6	91.9
37.5 and under 42.5 cents	416	7.1	11.6	82.5 and under 87.5 cents	174	2.9	94.8
42.5 and under 47.5 cents	916	15.8	27.4	87.5 and under 92.5 cents	95	1.7	96.5
47.5 and under 52.5 cents	983	16.8	44.2	92.5 and under 100.0 cents	82	1.4	97.9
52.5 and under 57.5 cents	702	12.1	56.3	100.0 and under 110.0 cents	81	1.4	99.3
57.5 and under 62.5 cents	503	8.6	64.9	110.0 and under 125.0 cents	37	.6	99.9
62.5 and under 67.5 cents	537	9.3	74.2	125.0 cents and over	5	.1	100.0

HOURLY EARNINGS BY INDIVIDUAL PLANTS

In analyzing the data for this industry, it should be remembered that there are relatively few plants involved. Hence, the validity of any summary figures for the industry depends upon the dispersion of plants and upon company policy.

The average hourly earnings of the lowest and highest plants differ by 32.6 cents. However, if the two highest-paid establishments are excluded, this spread is narrowed to 10.8 cents. The average for these 10 plants is 56.4 cents, instead of 58.7 cents when all plants are included.

If attention is centered on the 10 plants with a relatively homogeneous wage policy, certain alterations of the wage distribution of the industry are to be noted. The distribution of individual earnings still covers the same range of wage classes and has the principal modal concentration in the same class (from 47.5 to 52.5 cents), but there are proportionately more workers in the lower and less in the higher wage classes. Thus, the number of employees in this distribution who earned under 57.5 cents was 63.8 percent, while 36.2 percent were paid 57.5 cents or over. The corresponding figures in the distribution for all establishments were 56.3 and 43.7 percent.

Hence, the inclusion of the two plants with the highest averages has some bearing on the wage structure of the industry. But at this stage of the discussion, their inclusion does not confuse the analysis of the prevailing general practices with respect to wages in the industry. As will be pointed out later, their influence is particularly significant in connection with the data on an occupational basis.

In this connection, it should also be pointed out that an examination of the averages pertaining to individual plants gives little indication of regional differences and no positive evidence of such differences. There is just as much variation between the averages of establishments in adjacent communities as between plants that are far apart.

HOURLY EARNINGS OF MALE EMPLOYEES

Of the 5,823 employees covered in all plants, 3,140, or 53.9 percent, were males. Their average hourly earnings amounted to 66.1 cents in October 1937. According to the wage distribution in table 2, none of them received less than 27.5 cents an hour. The number paid between 27.5 and 47.5 cents constituted 8.2 percent of the total, while 19.5 percent earned 77.5 cents or more. The remaining 72.3 percent were spread over the groups from 47.5 to 77.5 cents, but no pronounced concentration was found within this range.

The lack of a pronounced concentration in the total male distribution is due to the classification according to skill. The semiskilled workers (1,390 or 44.3 percent) constitute the most important element in the industry. However, the skilled employees are also significant in number (940 or 29.9 percent), while the unskilled group is not much smaller (810 or 25.8 percent). Moreover, the variations among the three groups are likewise fairly pronounced, the average hourly earnings being 78.2 cents for skilled, 62.6 cents for semiskilled, and 57.1 cents for unskilled. As is often the case in other industries, the difference between the semiskilled and skilled is considerably larger (almost three times) than the one between the unskilled and semiskilled.

TABLE 2.—*Percentage Distribution of Male Ammunition Workers, by Average Hourly Earnings in October 1937, by Skill*

Average hourly earnings	All male employees	Skilled	Semiskilled	Unskilled
Under 27.5 cents	----	----	----	----
27.5 and under 32.5 cents	0.2	----	0.4	----
32.5 and under 37.5 cents	.6	----	1.3	----
37.5 and under 42.5 cents	2.6	----	1.9	7.2
42.5 and under 47.5 cents	4.8	0.2	6.5	6.9
47.5 and under 52.5 cents	10.2	2.0	9.8	20.6
52.5 and under 57.5 cents	14.3	3.2	17.0	22.3
57.5 and under 62.5 cents	13.2	9.9	14.8	14.4
62.5 and under 67.5 cents	14.5	17.0	14.5	11.8
67.5 and under 72.5 cents	8.8	8.7	9.8	7.0
72.5 and under 77.5 cents	11.3	13.6	12.4	6.7
77.5 and under 82.5 cents	5.8	9.5	5.5	2.2
82.5 and under 87.5 cents	4.5	9.8	3.3	.4
87.5 and under 92.5 cents	2.8	7.5	.9	.5
92.5 and under 100.0 cents	2.5	6.8	1.0	----
100.0 and under 110.0 cents	2.6	7.5	.8	----
110.0 and under 125.0 cents	1.1	3.8	.1	----
125.0 cents and over	.2	.5	----	----
Average of all employees (in cents)	66.1	78.2	62.6	57.1

The differences in wage levels among the three male groups according to skill are shown in greater detail by a comparison of their wage distributions. Thus, from the standpoint of wage classes covered, the largest spread appears for the semiskilled (from 27.5 cents to $1.25), the next largest for the skilled (from 42.5 cents to $1.25 and over), and the smallest for the unskilled (from 37.5 to 92.5 cents). Furthermore, as regards averages the semiskilled were closer to the unskilled than to the skilled, while in the distributions they resemble more closely the skilled than the unskilled. Both the semiskilled and skilled distributions are essentially bimodal in character, the first mode occurring respectively between 52.5 and 57.5 cents and between 62.5 and 67.5 cents, with the second mode appearing in the same class in each case, or between 72.5 and 77.5 cents. On the other hand, the unskilled distribution is essentially unimodal, the mode occurring between 52.5 and 57.5 cents.

A further comparison of the three wage distributions shows that the number of males paid less than 62.5 cents an hour, or just below the semiskilled average, was 15.3 percent for skilled, 51.7 percent for semiskilled, and 71.4 percent for unskilled. If 57.5 cents is taken as the upper limit, which is slightly above the unskilled average, the respective percentages are 5.4, 36.9, and 57.0.[4] However, the number earning 77.5 cents (slightly less than the skilled average) or more amounted to 45.4 percent for skilled, 11.6 percent for semiskilled, and 3.1 percent for the unskilled.

[4] In this connection, it should be noted that, while none of the unskilled received less than 37.5 cents, there were 1.7 percent semiskilled earning under that amount.

If the two highest-paid establishments are omitted, there is relatively little change in both the averages and distributions of the male workers. With respect to the averages, the figures are 64.3 cents for all males, 76.0 cents for skilled, 61.1 cents for semiskilled, and 55.7 for unskilled. As regards the distributions, there is some decrease in the proportion found in the upper wage classes. Thus, for all males, the number earning 62.5 cents or more dropped from 54.1 to 49.1 percent. The percentage of skilled receiving 87.5 cents or over was reduced from 26.1 to 18.8. Lastly, the number paid 62.5 cents or more declined from 48.3 to 42.3 for semiskilled and from 28.6 to 21.6 percent for unskilled. The outstanding difference in the distributions is the increased concentration in the modal class and within the limits of 47.5 to 62.5 cents in the case of both semiskilled and unskilled workers.

HOURLY EARNINGS OF FEMALE EMPLOYEES

In spite of the generally hazardous nature of the industry, there is a large proportion of women employed by it. They number 2,683, which is 46.1 percent of the total labor force. Only a few of these women (13 forewomen) may be regarded as skilled. In the tables they have not been distinguished from the semiskilled. The great majority of the females, 2,472 or 92.1 percent, are semiskilled, and nearly one-half of them are employed as inspectors, packers, and electric blasting cap line operators. The number of unskilled females was only 198, or 7.4 percent of all women.

The average earnings per hour of all female workers were 49.5 cents in October 1937. As may be seen from the wage distribution in table 3, 8.8 percent of them earned below 37.5 cents an hour. Nearly two-thirds were found within a 15-cent range above that limit, namely from 37.5 to 52.5 cents. About one-fifth were paid between 52.5 and 72.5 cents, and only a little more than 5 percent received as much as 72.5 cents and over.

TABLE 3.—*Percentage Distribution of Female Ammunition Workers by Average Hourly Earnings in October 1937, by Skill*

Average hourly earnings	All female employees	Semiskilled[1]	Unskilled	Average hourly earnings	All female employees	Semiskilled[1]	Unskilled
Under 27.5 cents	0.6	0.6	-------	67.5 and under 72.5 cents	4.5	4.7	3.0
27.5 and under 32.5 cents	1.4	1.3	3.0	72.5 and under 77.5 cents	2.8	2.9	1.0
32.5 and under 37.5 cents	6.8	6.8	7.6	77.5 and under 82.5 cents	.8	.9	-------
37.5 and under 42.5 cents	12.4	12.4	12.1	82.5 and under 87.5 cents	1.3	1.3	-------
42.5 and under 47.5 cents	28.6	29.1	22.2	87.5 and under 92.5 cents	.3	.4	-------
47.5 and under 52.5 cents	24.6	23.9	33.9	92.5 and under 97.5 cents	.1	.1	-------
52.5 and under 57.5 cents	9.5	9.4	10.6				
57.5 and under 62.5 cents	3.3	3.2	4.0	Average of all employees (in cents)	49.5	49.5	48.5
62.5 and under 67.5 cents	3.0	3.0	2.6				

[1] Include also 13 skilled employees (forewomen).

In view of the great preponderance of semiskilled employees in the total female force, the averages for all females and for the semiskilled are exactly the same. There is also a close similarity between the respective distributions.

The differences in earnings between the semiskilled and unskilled female groups appear to be of little significance. A few of the semiskilled workers and forewomen, it is true, earn more than 77.5 cents an hour, while none of the unskilled do. But the average of 48.5 cents for unskilled workers as a whole is only 1 cent less than that for the semiskilled. On the other hand, while both distributions are essentially unimodal in character, the modal class of the semiskilled (42.5 to 47.5 cents) is below that of the unskilled (47.5 to 52.5 cents), and 50.2 percent of the semiskilled earned less than 47.5 cents, as against 44.9 percent of the unskilled. Finally, in evaluating the importance to be attached to the unskilled as a distinctive wage group among the females, it must be noted that, in the 10 plants with the most nearly comparable average hourly earnings, semiskilled females averaged 45.7 cents, while the unskilled averaged 47.4 cents.

While there seems to be little basis for attempting to distinguish between the earnings of females in occupations classified by the industry as unskilled and the majority of those classified as semiskilled, it is important to notice the influence of the two plants with exceptionally high averages upon the earnings for females in the industry as a whole. Disregarding these establishments, the average for all females in the remaining plants is 3.7 cents less than the average for the 12 establishments. As regards the distributions (see table 4), the omission of the two highest-paid plants results in an increase of the percentage found under 57.5 cents and a decrease in the percentage found in the classes of 57.5 cents or over. Under 57.5 cents, the increase was especially notable in the classes between 42.5 and 52.5 cents. In the upper wage classes, the decrease was particularly conspicuous in the classes of 57.5 cents and over, the actual reduction being from 16.1 to 2.2 percent.

TABLE 4.—*Percentage Distribution of Female Ammunition Workers by Average Hourly Earnings in 12 and in 10 Plants, October 1937*

Average hourly earnings	Percentage distribution for—	
	12 plants	10 plants [1]
Under 32.5 cents	2.0	2.4
32.5 and under 37.5 cents	6.8	8.0
37.5 and under 42.5 cents	12.4	14.6
42.5 and under 47.5 cents	28.6	33.5
47.5 and under 52.5 cents	24.6	28.9
52.5 and under 57.5 cents	9.5	10.4
57.5 and under 62.5 cents	3.3	1.4
62.5 and under 67.5 cents	3.0	.4
67.5 and under 72.5 cents	4.5	.3
72.5 and under 77.5 cents	2.8	.1
77.5 cents and over	2.5	(2)

[1] Exclusive of 2 plants with the highest averages.

[2] Less than 1/10 of 1 percent.

DIFFERENCES BY PRODUCT

The Census of Manufactures combines the manufacture of blasting and detonating caps with that of small-arms ammunition into a single industry because of the similarity in raw materials, processes, and many of the parts employed in making both kinds of products. On the other hand, there are important differences between the two branches, which must be taken into account in analyzing the wage structure of the industry.

One difference lies in the composition of the labor force. The females predominate in establishments making blasting caps, while the males constitute the majority in small-arms ammunition plants. In the blasting caps branch, as disclosed by this survey, males formed 42.9 and females 57.1 percent of the labor forces compared with 58.7 and 41.3 percent in the ammunition branch. Moreover, among males in ammunition there is a larger proportion of skilled and semiskilled and a smaller proportion of unskilled than in blasting caps. Exactly the opposite is true of females, the proportion of semiskilled being greater and of unskilled smaller in blasting caps than in ammunition. (See table 5.)

TABLE 5.—*Number of Employees in Ammunition and Related Products Industry, by Product, Sex, and Skill, October 1937*

Skill	Males				Females			
	Blasting and detonating caps		Small arms ammunition		Blasting and detonating caps		Small arms ammunition	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Skilled	203	26.9	737	30.9	(1)		(1)	
Semiskilled	314	41.6	1,076	45.1	956	95.3	1,529	91.0
Unskilled	238	31.5	572	24.0	47	4.7	151	9.0
Total	755	100.0	2,385	100.0	1,003	100.0	1,680	100.0

[1] There were 13 forewomen in both branches of the industry, classed as skilled, who were included under the semiskilled workers.

There is also a difference in the occupational structure between the two kinds of product. Thus, while the great majority of occupations are common to both branches of the industry, there are certain occupations peculiar to small-arms ammunition and others to blasting caps. For males, the principal occupations found only in the ammunition branch are as follows: Assemblers, cartridges and shells; casters, bullet slugs; paper tube and wad operators; and swagers and groovers, slugs. Those unique to blasting caps are: Coilers, electric blasting cap leads; delay makers; electric blasting cap line operators; and wire operators, miscellaneous. For females, the chief occupations occurring only in ammunition are as follows: Assemblers, cartridges

and shells; assemblers, core and jacket of bullet; heading operators; and paper tube and wad operators. The main occupations peculiar to the making of blasting caps are: Coilers, electric blasting cap leads; electric blasting cap line operators; pluggers; shunters, electric blasting caps; solderers, bridge; sulphurers, hand; and wire operators, miscellaneous. Nearly all of the occupations peculiar to ammunition are in connection with the operation of machines, while almost all of the special occupations in blasting caps are based on hand operations.

On the basis of the total plants covered, the average hourly earnings of all workers in blasting caps are considerably higher than those in small-arms ammunition. Of course, this is largely due to the fact that the two highest-paid establishments are engaged in the making of blasting caps. If these plants are left out, the average earnings per hour are the same in both branches of the industry, namely about 56 cents.

Owing to the difference in the composition of the labor force, any comparison for average hourly earnings between blasting caps and small-arms ammunition must be made on the basis of the groups according to sex and skill. If the figures including the two highest-paid establishments (making blasting caps) are used, it is fairly evident that the average would be considerably higher in all cases for blasting caps than for ammunition. On the other hand, with the exclusion of these plants, the picture is somewhat different. Thus, males received exactly the same average, namely 64 cents, in each branch of the industry. Classified by skill, however, the averages are 79 cents for skilled, 58 cents for semiskilled, and 61 cents for unskilled in blasting caps, which may be compared respectively with 76, 62, and 54 cents in ammunition. In the case of females, the averages are 50 cents for both semiskilled and unskilled in blasting caps, as against respectively 44 and 47 cents in ammunition. It will be seen, therefore, that with the exception of semiskilled males, each of the groups show higher average earnings per hour for blasting caps than for ammunition.

Every one of the occupations peculiar to either blasting caps or small-arms ammunition is semiskilled. For males, as noted above, there are four occupations found only in blasting caps and four occurring only in ammunition. According to table 6, if the two highest-paid establishments (making blasting caps) are included, the four occupations in blasting caps averaged somewhat more than the four ammunition occupations. On the other hand, if the highest-paid plants are omitted, the lowest occupational average in ammunition is somewhat higher than the highest occupational average in blasting caps. As regards females, there are four occupations peculiar to ammunition and seven found only in blasting caps. The same table indicates that, either with or without the two highest-paid plants, the highest occupational average in ammunition is below the lowest occupational

average in blasting caps. In other words, these figures confirm the above findings of the data for the total male and female semiskilled groups as between blasting caps and small-arms ammunition.

TABLE 6.—*Average Hourly Earnings of Ammunition Workers by Sex, Skill, and Occupation, October 1937*

Sex, skill, and occupation	12 plants		10 plants[1]
	Number of employees	Average hourly earnings	Average hourly earnings
All male employees	3,140	$0.661	$0.643
Skilled	940	.782	.770
Adjusters, machine	250	.679	.678
Foremen, working	128	.827	.801
Powder mixers	50	.844	.839
Loaders, caps and primers, machine	46	.759	.712
Machinists	189	.824	.791
Mechanics, maintenance	158	.770	.723
Tool and die makers	71	.942	[2] .942
Miscellaneous, skilled	48	.747	.725
Semiskilled	1,390	.626	.611
Annealers	27	.634	[2] .634
Apprentices	47	.458	.463
Assemblers, cartridges and shells [3]	151	.660	[4] .660
Casters, bullet slugs [3]	52	.666	[4] .666
Cupping-press operators	37	.590	.581
Coilers, electric blasting cap leads [5]	44	.686	.551
Delay makers [5]	45	.700	.607
Drawing-press operators	65	.603	.598
Electric blasting cap line operators [5]	40	.603	.575
Inspectors	86	.612	.553
Loaders, caps and primers, hand	82	.707	[2] .707
Lubricators and waterproofers	39	.588	[2] .588
Mechanics' helpers	55	.553	.536
Operators on metal cases, miscellaneous	62	.572	[2] .572
Packers, ammunition and caps	43	.639	.583
Packers, shipping	63	.613	.592
Paper tube and wad operators [3]	35	.609	[4] .609
Swagers and groovers, slugs [3]	35	.641	[4] .641
Testers, shooting	46	.591	.588
Washers, cases and shells	56	.612	.611
Wire operators, miscellaneous [5]	51	.629	.548
Miscellaneous semiskilled workers:			
Productive	111	.596	.589
Indirect	118	.706	.668
Unskilled	810	.571	.557
Helpers, productive	190	.614	.580
Laborers	179	.536	.526
Learners	57	.565	.557
Shakers	57	.624	[2] .624
Truckers	174	.566	.561
Watchmen	105	.559	.546
Miscellaneous, unskilled	48	.536	.533
All female employees	2,683	.495	.458
Semiskilled	2,485	.495	.457
Assemblers, cartridges and shells [3]	150	.434	[4] .434
Assemblers, core and jacket of bullet [3]	42	.452	[4] .452
Coilers, electric blasting cap leads [5]	105	.602	.527
Cut-off operators	68	.462	.433
Drawing press operators	91	.401	[2] .401
Electric blasting cap line operators [5]	279	.509	[2] .509
Heading operators [3]	80	.464	[4] .464
Inspectors	577	.473	.438
Packers, ammunition and caps	308	.447	.443
Paper tube and wad operators [3]	57	.448	[4] .448
Pluggers [5]	81	.613	.488

[1] Exclusive of 2 plants (making blasting and detonating caps) with the highest averages.
[2] Same average as for 12 plants, due to the fact that no employees were found in this occupation in the 2 plants (making blasting and detonating caps) with the highest averages.
[3] This occupation was found only in small arms ammunition.
[4] Same average as for 12 plants, due to the fact that this occupation was found only in small arms ammunition.
[5] This occupation found only in blasting and detonating caps.

TABLE 6.—*Average Hourly Earnings of Ammunition Workers, by Sex, Skill, and Occupation, October 1937*—Continued

Sex, skill, and occupation	12 plants		10 plants
	Number of employees	Average hourly earnings	Average hourly earnings
Semiskilled—Continued.			
Shunters, electric blasting caps [5]	100	$0.630	$0.469
Solderers, bridge [5]	48	.669	.526
Sulphurers, hand [5]	135	.620	.477
Wire operators, miscellaneous [5]	50	.601	.505
Miscellaneous, semiskilled [6]	314	.461	[2] .461
Unskilled	198	.485	.474
Shakers	134	.487	.484
Miscellaneous, unskilled	64	.480	.448

[2] Same average as for 12 plants, due to the fact that no employees were found in this occupation in the 2 plants (making blasting and detonating caps) with the highest averages.
[5] This occupation found only in blasting and detonating caps.
[6] Include 13 skilled employees (forewomen).

DATA BY OCCUPATION AND SEX

The average hourly earnings by occupation and sex are shown in table 6 separately for all 12 plants and for those with the 2 highest-paid establishments (making blasting caps) eliminated. Naturally, there is no difference between the averages in occupations found only in small-arms ammunition. Nor is there any difference in those occupations that, although occurring generally in blasting caps, do not appear in the two plants with the highest averages. In the remaining occupations, the differences ranged from one-tenth of 1 cent to over 16 cents. The greatest differences, of course, are found in the occupations that are peculiar to blasting caps, for it is in these occupations that the withdrawal of the 2 plants narrows the sample most.

There are a number of occupations in which both males and females are employed. Among the semiskilled, these include assemblers of cartridges and shells, coilers of electric blasting cap leads, drawing-press operators, electric blasting cap line operators, inspectors, packers of ammunition, paper tube and wad operators, and miscellaneous wire operators. The only important unskilled occupation in which both males and females appear is that of shakers. It will be seen that in every case the average hourly earnings of the males exceeded those of the females, whether the comparison is made on the basis of the data for all 12 plants or for those excluding the 2 highest-paid establishments. However, the difference varied considerably from one occupation to another.

Any comparison in average hourly earnings between males and females for the same skill and occupation must be examined with certain reservations, because, although both males and females in a given plant have the same occupational designation, there may be actually considerable variation in the duties performed. This is

especially true with respect to the lifting of heavy burdens. Thus, male workers in a given occupation are expected to perform this task in addition to their regular duties, while in the case of females special men are often employed to perform the heavy work.

PROPORTION EARNING UNDER FORMER CODE MINIMA

The making of small-arms ammunition was included under the N. R. A. code covering the manufacture of both small arms and small-arms ammunition. This code provided for a minimum of 40 cents an hour for males and 32½ cents for females. It also stipulated that beginners without experience could be paid for a period not to exceed 60 days at the rate of not less than 80 percent of the minimum wage, provided their number did not exceed 5 percent of the total labor force.

In October 1937 very few employees earned less than the former code minima in small-arms ammunition. Thus, only 1.2 percent of the males received less than 40 cents an hour, while 3.0 percent of the females received less than 32.5 cents per hour.

The making of blasting and detonating caps was not included under this code.

COMPARISON WITH OTHER INDUSTRIES

In order to compare the average earnings per hour (58.7 cents) in the ammunition and related products industry with those in other industries, it is necessary to use for the latter the figures based on employment and pay-roll reports for October 1937, which were compiled by the Bureau's Division of Employment Statistics.[5]

If the averages for the 89 manufacturing industries included in the employment and pay-roll reports for October 1937 are arrayed, it is found that 25 of these industries have lower averages than found in this survey for ammunition and related products. All but 6 of the 25 industries are in the nondurable goods group, 9 of them being in the textiles, 3 in the food, and 3 in the chemicals groups.

Unskilled male employees in the ammunition and related products industry averaged 57.1 cents an hour. This figure may be compared with the average hourly entrance rate of adult male common laborers in 20 industries, which is based on a survey made by the Bureau of Labor Statistics in July 1937. Taking the figure for the North, the average hourly entrance rate amounted to 55.3 cents, which is 1.8 cents less than the average of the unskilled males in ammunition and related products.

Average Weekly Hours

In 10 out of the 12 plants covered in the ammunition and related products industry, the full-time operations extended over 5 days, or

[5] Such figures are not published for ammunition and related products, because of the small size of the industry.

40 hours per week. In one establishment, the scheduled hours for most wage earners were 42½ for females and 43⅓ for males, the work also extending over 5 days. The full-time hours for nearly all employees in the remaining plant amounted to 48 for females and 50 for males, with operations covering 5½ days in the week. Hence, as in the case of average hourly earnings, the prevailing tendencies in weekly hours in this industry are also obscured by the considerably longer hours in two of the establishments.

The average weekly hours actually worked by all employees were 40.4 in October 1937, while the weighted average of scheduled hours was approximately 42. According to table 7, nearly one-sixth of the employees worked less than 40 hours per week. The number employed exactly 40 hours amounted to 63.5 percent. One-fifth of the wage earners had a workweek of over 40 hours, and less than 10 percent worked 48 hours and over.

The average hours actually worked by males were 41.7 per week. Ten percent of the males had a workweek of less than 40 hours, and nearly six-tenths were employed exactly 40 hours. The number working over 40 hours amounted to about one-third of the total, with as many as one-sixth employed 48 hours or over.

TABLE 7.—*Distribution of Ammunition Workers by Weekly Hours in October 1937, and by Sex*

Weekly hours	All employees			Males			Females		
	Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Under 16 hours	42	0.7	0.7	19	0.6	0.6	23	0.9	0.9
16 and under 24 hours	43	.8	1.5	14	.5	1.1	29	1.0	1.9
24 and under 32 hours	100	1.7	3.2	41	1.3	2.4	59	2.2	4.1
32 and under 36 hours	334	5.7	8.9	108	3.4	5.8	226	8.5	12.6
36 and under 40 hours	392	6.7	15.6	135	4.3	10.1	257	9.5	22.1
Exactly 40 hours	3,694	63.5	79.1	1,845	58.8	68.9	1,849	69.0	91.1
Over 40 and under 44 hours	323	5.5	84.6	217	6.9	75.8	106	3.9	95.0
44 and under 48 hours	334	5.8	90.4	263	8.3	84.1	71	2.7	97.7
48 and under 56 hours	465	8.0	98.4	403	12.9	97.0	62	2.3	100.0
56 hours and over	96	1.6	100.0	95	3.0	100.0	1	(1)	100.0
Total	5,823	100.0		3,140	100.0		2,683	100.0	
Average of all employees		40.4			41.7			38.9	

[1] Less than 1/10 of 1 percent.

The actual hours worked by females averaged 38.9 per week. More than one-fifth of them were employed less than 40 hours, but nearly seven-tenths had a workweek of exactly 40 hours. Less than 10 percent of the females worked over 40 hours, and only somewhat more than 2 percent had a workweek of as much as 48 hours or over.

As indicated above, a substantial number of workers, especially females, worked less than the full-time hours during the week for which data were obtained. This may be explained largely by ab-

senteeism and labor turn-over. On the other hand, the employees working longer than the full-time hours, most of whom are males, are largely those in the service and maintenance departments of the establishments.

Average Weekly Earnings

In October 1937 average weekly earnings of all employees in the ammunition and related products industry amounted to $23.71.

In the case of males, the average earnings were $27.55 per week. Classified by skill, the averages amounted to $33.82 for skilled, $25.65 for semiskilled, and $23.53 for unskilled.

As shown in table 8, less than 2 percent of all males earned under $15 per week. About 40 percent were paid between $15 and $25, and nearly 45 percent received between $25 and $35. Less than 15 percent earned $35 or more, and less than 5 percent received as much as $45 or over.

For females, the average earnings per week were $19.23, the figures amounting to $19.30 for semiskilled and $18.34 for unskilled.

Nearly 5 percent of all female employees were paid under $12.50. About one-fourth earned between $12.50 and $17.50, and considerably more than one-half received $17.50 and under $22.50. About 15 percent earned $22.50 or over, and only 3 percent received as much as $30 or more.

It should be noted that the above data on weekly earnings are influenced by the considerably higher average hourly earnings in two establishments and the considerably higher full-time weekly hours in two other establishments, both of which affect to a large degree the prevailing tendency with respect to these figures in the industry.

TABLE 8.—*Distribution of Ammunition Workers, by Sex, and by Average Weekly Earnings, October 1937*

Average weekly earnings	Males			Average weekly earnings	Females		
	Number of employees	Simple percentage	Cumulative percentage		Number of employees	Simple percentage	Cumulative percentage
Under $5	5	0.2	0.2	Under $5.00	13	0.5	0.5
$5 and under $10	18	.5	.7	$5.00 and under $7.50	19	.7	1.2
$10 and under $15	30	1.0	1.7	$7.50 and under $10.00	22	.8	2.0
$15 and under $20	380	12.1	13.8	$10.00 and under $12.50	63	2.4	4.4
$20 and under $25	893	28.4	42.2	$12.50 and under $15.00	272	10.1	14.5
$25 and under $30	903	28.8	71.0	$15.00 and under $17.50	427	15.9	30.4
$30 and under $35	483	15.4	86.4	$17.50 and under $20.00	1,014	37.8	68.2
$35 and under $40	192	6.1	92.5	$20.00 and under $22.50	427	15.9	84.1
$40 and under $45	101	3.2	95.7	$22.50 and under $25.00	102	3.8	87.9
$45 and under $50	63	2.0	97.7	$25.00 and under $27.50	111	4.2	92.1
$50 and under $60	52	1.7	99.4	$27.50 and under $30.00	130	4.8	96.9
$60 and under $70	17	.5	99.9	$30.00 and under $32.50	40	1.5	98.4
$70 and over	3	.1	100.0	$32.50 and under $35.00	31	1.2	99.6
				$35.00 and over	12	.4	100.0
Total	3,140	100.0		Total	2,683	100.0	

WAGES OF INSURED WORKERS IN CZECHOSLOVAKIA, DECEMBER 1937 [1]

ALTHOUGH the wages of workers insured under the sickness-insurance system in Czechoslovakia showed a tendency to rise during 1936 and 1937, at the end of 1937 more than 46 percent of these insured workers were receiving daily wages of less than 18 koruny.[2] The distribution of the insured workers, by wage classes, in the month of December 1937 is shown in the following statement.

	Percent of insured workers
Wage class I (6.00 koruny or less)	12. 1
Wage class II (6.00 and under 10.00 koruny)	20. 0
Wage class III (10.00 and under 14.00 koruny)	14. 1
Wage class IV (14.00 and under 18.00 koruny)	11. 6
Wage class V (18.00 and under 22.00 koruny)	11. 4
Wage class VI (22.00 and under 25.50 koruny)	7. 3
Wage class VII (25.50 and under 28.50 koruny)	4. 6
Wage class VIII (28.50 and under 31.50 koruny)	3. 4
Wage class IX (31.50 and under 34.50 koruny)	3. 2
Wage class X (34.50 koruny and over)	12. 2
Total	100. 0

The average daily wages of male and female insured workers, from 1929 to 1937, are shown in the following table.

Average Daily Wages of Workers Insured Against Sickness in Czechoslovakia, 1929 to 1937

[Average exchange rate of koruna December 1937=3.5 cents]

Year	Average daily wages (in koruny)			Indexes of wages (1929=100)		
	Males	Females	Both sexes	Males	Females	Both sexes
1929	22. 00	13. 88	19. 08	100. 0	100. 0	100. 0
1930	21. 63	13. 71	81. 73	98. 3	98. 8	98. 2
1931	21. 10	13. 31	18. 15	95. 9	95. 9	95. 1
1932	19. 85	12. 52	16. 98	90. 2	90. 2	89. 0
1933	19. 07	12. 14	16. 26	86. 7	87. 5	85. 2
1934	18. 62	11. 82	15. 91	84. 6	85. 2	83. 4
1935	18. 55	11. 70	15. 84	84. 3	84. 3	83. 0
1936	19. 08	11. 89	16. 28	86. 7	85. 7	85. 3
1937	20. 43	12. 30	17. 40	92. 9	88. 6	91. 2

[1] Data are from Statistický Zpravodaj (Prague), issue of February 5, 1938, pp. 91, 92.

[2] Average exchange rate of koruna in December 1937=3.5 cents.

WAGE SCALE FOR SEAMEN IN DENMARK [1]

A COMPROMISE wage scale for seamen, proposed by a Government arbitrator after a strike had been voted by the men, was accepted by a narrow margin of votes. This new scale provides for the following monthly wage rates.

	Old rate (kroner [1])	*New rate (kroner [1])*
Boatswains	205	215
Carpenters with one year's sea experience	205	215
Carpenters with less than one year's experience	185	195
Able seamen	187	200
Ordinary seamen	91	100
Light hands	41	45

[1] Average exchange rate of krone in March 1938, 21.3 cents.

In tankers a supplement of 20 kroner will henceforth be paid instead of 15 kroner. The allowance for bedding and utensils is raised from 10 to 12 kroner, and the allowance for carpenters furnishing their own tools from 12 to 15 kroner. Overtime pay is increased correspondingly.

If off days ashore (given at the rate of half a day off every 15 days or a whole day every month) cannot be given, a day's wage plus the subsistence allowance may be paid in lieu thereof.

The agreement has been signed for 2 years—until March 1, 1940—but notice to terminate it on March 1, 1939, may be given if the cost-of-living index for the month of November 1938 falls or rises at least six points.

WAGES OF METAL WORKERS IN THE PARIS REGION [2]

THE progressive advance in the wages of metallurgical workers in Paris and the surrounding region since the summer of 1936, when the various laws affecting wages and working conditions were enacted, is shown in table 1. For purposes of comparison the average wages paid the different occupational groups in 1914, 1930, and 1935 are also shown. There have been five wage increases in the industry since the last quarter of 1935 (the low point of the depression in France), representing a total increase of 81 percent in the average minimum hourly wage. In general the wages of workers in the metal trades are higher than those of workers of similar skill and training in other industries.

[1] Data are from Joint Press Report of International Transport Workers' Federation, Amsterdam, March 28, 1938.

[2] Report by Benjamin M. Hulley, American consul at Paris, February 24, 1938.

TABLE 1.—*Average Minimum Hourly Wages of Workers in Metallurgical and Machine Industries in the Paris Region, 1914, 1930, 1935, 1936, and 1937*

[Average exchange rate of franc in 1914=19.3 cents; 1930=3.92 cents; 1935=6.60 cents; 1937=4.05 cents; January 1938=3.34 cents]

Occupation	1914	1930, fourth quarter	1935, fourth quarter	1936, November	1937			1938, January
					January	February	March	
	Francs	*Francs*	*Francs*	*Francs*	*Francs*	*Francs*	*Francs*	*Francs*
Average, all workers	0.66	5.70	5.38	6.65	8.00	8.68	9.03	9.75
Highly skilled workers	.85	6.62	6.35	7.54	9.05	9.82	10.17	10.92
Skilled workers	.60	5.45	5.05	6.50	7.80	8.45	8.80	9.55
Laborers:								
Male	.45	4.30	4.05	5.25	6.30	6.85	7.20	7.95
Female	.25	3.50	3.10	4.25	5.10	5.55	5.90	6.55

The increases since the collective agreement of June 12, 1936, averaging about 50 percent, are shown in table 2.

TABLE 2.—*Average Minimum Hourly Wages of Workers in Metallurgical and Machine Industries in the Paris Region, 1936 and 1937*

[Average exchange rate of franc in June 1936=6.59 cents; December 1936 and January 1937=4.67 cents; March 1937=4.59 cents; November and December 1937=3.39 cents]

Industry and occupation	Minimum rates under wage adjustment of—					
	June 12, 1936[1]	Dec. 6, 1936[2]	Jan. 18, 1937[3]	Mar. 15, 1937[3]	Nov. 1, 1937[3]	Dec. 24, 1937[3]
	Francs	*Francs*	*Francs*	*Francs*	*Francs*	*Francs*
Machine-equipment industry:						
Highly skilled pattern makers (metal), pattern molders, casters, adjusters (automatic machines), coil winders	7.75	9.30	10.10	10.45	11.00	11.20
Machine industry:						
Highly skilled fitters, shapers, millers, welders, platers	7.20	8.65	9.40	9.75	10.30	10.50
Skilled fitters, chiselers, cutters, rollers, turners	7.00	8.40	9.10	9.45	10.00	10.20
Skilled workers, general:						
Male	6.25	7.50	8.15	8.50	9.05	9.25
Female	5.30	6.35	6.90	7.25	7.80	7.90
Boiler and plate shops:						
Mechanics, ironsmiths	7.50	9.00	9.75	10.10	10.65	10.85
Molders, tracers, rollers	8.00	9.60	10.40	10.75	11.30	11.50
Machine assembling:						
Skilled workers, male	6.10	7.30	7.95	8.30	8.85	9.05
Skilled workers, female	4.90	5.90	6.35	6.70	7.25	7.35
Laborers, heavy work	5.40	6.50	7.05	7.40	7.95	8.05
Laborers, common:						
Male	5.00	6.00	6.50	6.85	7.40	7.60
Female	4.25	5.10	5.55	5.90	6.45	6.55

[1] Fixed by collective agreement.
[2] Application of 40-hour week.
[3] Arbitration award.

WAGES IN GERMANY, DECEMBER 1937

OFFICIAL German figures on wages in 17 industries at the end of 1937 show average hourly wages for skilled male workers ranging from 59.6 pfennige in the manufacture of linen cloth to 105.2 pfennige in the brewing industry; rates of unskilled employees ranging from 49.6 to 93.2 pfennige, in the same two industries. For females the range was from 43.4 pfennige in the pottery industry to 59.9 pfennige in the shoe industry, for skilled workers, and from 36.1 pfennige in the pottery industry to 59.5 pfennige in the brewing industry, for unskilled workers. The average hourly rates in the 17 industries in December 1937 are shown in the table following.[1]

Average Hourly Wages in Seventeen Specified Industries in Germany, December 1937

[Average exchange rate of mark (100 pfennige) in December 1937=40.3 cents]

Industry	Average hourly wages				
	Men			Women	
	Skilled	Semi-skilled	Unskilled	Skilled	Unskilled
	Pfennige	*Pfennige*	*Pfennige*	*Pfennige*	*Pfennige*
All 17 industries	78.5	68.4	62.3	51.5	43.4
Bituminous-coal mining	95.5		59.9		
Lignite-coal mining	75.2	68.7	66.0		
Metal products	78.3	71.3	62.0		45.2
Chemical	87.1	70.1			46.9
Building trades	81.6		65.6		
Paper manufacture	75.9		57.3		38.6
Paper products	92.9	83.8	69.0	52.7	43.0
Printing	96.1		79.7		48.8
Woodworking	79.4	66.9	61.3		
Pottery	70.9		58.9	43.4	36.1
Textiles	63.6	63.6	53.1	50.0	39.5
Worsted-yarn spinning	69.8	69.8	54.4	45.0	39.2
Woolens	61.3	61.3	54.2	51.9	41.3
Cotton	63.3	63.3	52.2	51.8	39.4
Linen	59.6	59.6	49.6	45.6	36.8
Silk	58.2	58.2	54.4	51.3	41.9
Velvet	71.9	71.9	61.6	53.7	40.9
Ribbon weaving	65.3	65.3	54.4	51.1	42.0
Lace and curtain weaving	75.4	75.4	55.9		39.3
Knit goods	64.2	64.2	53.1	44.3	38.4
Clothing	74.1			47.9	
Shoes	79.2	79.2		59.9	
Brewing	105.2		93.2		59.5
Baking and confectionery	80.2		68.5		46.0
State railways	78.7	67.5	64.4		
State postal service	73.4	66.9	62.8		

Real wages and net money wages of German workers underwent considerable change from 1933 to the end of 1937, as the result of changes in the cost of living and of various wage deductions. The average hourly rates have, however, remained practically unchanged.

[1] Data are from Wirtschaft und Statistik (Berlin), February 1, 1938, p. 108.

Employment Offices

OPERATIONS OF UNITED STATES EMPLOYMENT SERVICE, MARCH 1938

GENERAL increases in the number of jobs filled and a slight moderation in the volume of workers registering for employment were reported by offices of the United States Employment Service during March. During the month 177,132 placements were made. Some 9¼ million personal visits were received from job seekers and employers during the 25 working days.

Employment Service offices received 613,706 original and 4,416,596 continued claims during March in the 23 States paying unemployment compensation benefits. This is a decline of 22.6 percent in the daily volume of original claims and of 7.5 percent in the rate of continued claims. During the 3 months ended March 31, a total of 3,425,011 original and 11,190,586 continued claims were received at public employment offices, according to preliminary reports.

Following 2 months of intense activity in connection with the inauguration of unemployment compensation benefit payments in 22 States and the registration of large numbers of unemployed job seekers in other States, the employment offices in March increased their placement activities. The daily rate of total placements in March was 12.8 percent higher than in February. The private placement rate rose 18.4 percent.

Because of the heavy load of registration and claims activities carried on by the offices, coupled with the effect of business recession, placement levels are still more than one-third lower than in the same period in 1937. However, the margin below a year ago was much less in March than in February. Release of Employment Service facilities from the registration activity to placement work is indicated by the fact that the increase in the rate of placements from February to March this year is greater than has been reported in any previous March.

Gains were particularly notable in the field of private employment. The daily volume of private placements rose 18.4 percent over February with 128,887 placements being made—70,527 of men and 58,360 of women. Private jobs of regular duration numbered 60,523 and those of temporary duration 68,364. Gains in the placements of men in private jobs were much larger than for women. The employment

offices also made 45,367 placements in public employment, a decline in daily rate of 1.6 percent from February, and 2,878 assignments on relief-work projects. Field visits rose 6.2 percent in daily volume during March.

A slight decline in applications for work received by the Employment Service offices occurred in March, but the total of over 1⅓ million represents one of the largest volumes reported in recent years. Of this number, 805,554 represented new applications and 536,064 were renewals of previously registered applicants. The daily rate of applications in March was 3.2 percent lower than in February. The greatest decline in demand for jobs occurred among new applicants, where the drop in daily volume was 9.7 percent. However, despite these declines, which follow small decreases in February, total applications in March were over 95 percent higher than 1 year earlier and new applications were 185.1 percent greater than in March 1937. Men formed the great majority of the applicants, numbering 601,236 among the new applicants. Declines in the current rate of applications from men were slightly less than for women.

The total number of persons seeking work through the Employment Service at the end of March remained practically unchanged from the number 1 month earlier. Despite the large number of applications received in the month, the almost equal aggregate number of placements and cancelations balanced the inflow, so that on March 31 the active file numbered 6,778,368, only three-tenths of 1 percent higher than at the close of February. It is likely that there would have been an actual decline during the month had it not been for special registration activity carried on in connection with an employment program for war veterans. Woman registrants in the active file declined by 2 percent during March. While there was a slight increase in the number of male registrants, this gain was restricted wholly to veterans. The number of nonveteran men seeking work through the Employment Service declined 1.1 percent in March, whereas the number of veterans registered for work with the Employment Service rose 28.9 percent.

The total active file was almost one-quarter larger than in March 1937 but was 27 percent less than in March 1936. The active file in the 23 States paying unemployment compensation benefits was 40.9 percent higher than 1 year earlier, whereas in the States which do not pay unemployment compensation benefits it was only 1.1 percent higher than in March 1937.

In cooperation with veteran organizations throughout the country United States Employment Service offices were utilized to secure applications of unemployed veterans in connection with a campaign to increase employment opportunities for former service men. Applications were received from 128,419 veterans in the month, over double

the daily rate in February. The number of new veteran registrants in March rose to 52,265, a volume over three times as great as that of either March 1937 or March 1936.

As a result of this large inflow the number of veterans seeking work through the Employment Service rose to 446,732, over 43 percent higher than the number in March 1937. Placements of veterans also rose to a greater extent than placements of nonveterans. A total of 9,972 veteran placements was made in March, a gain in daily rate of 25.4 percent over February. Placements in private employment numbered 5,728, a gain of 47.2 percent in daily rate.

Table 1 summarizes the activities of the Employment Service during March 1938.

TABLE 1.—*Summary of Operations of United States Employment Service, March 1938*

Activity	Number	Percent of change from—			
		February 1938		March 1937	March 1936
		Monthly total	Rate per working day		
Total applications	1,341,618	+15.2	−3.2	+95.3	+101.2
New applications	805,554	+7.5	−9.7	+185.1	+120.8
Renewals	536,064	+29.1	+8.5	+32.6	+77.6
Total placements	177,132	+34.3	+12.8	−39.8	−60.0
Private	128,887	+40.9	+18.4	−33.4	+38.4
Public	45,367	+17.1	−1.6	−50.2	−66.8
Relief	2,878	+71.4	+44.0	−69.7	−98.6
Active file	6,778,368	+0.3	----------	+23.4	−27.2

The veterans' activities of the Service for March are shown in table 2.

TABLE 2.—*Summary of Veterans' Activities of United States Employment Service, March 1938*

Activity	Number	Percent of change from—			
		February 1938		March 1937	March 1936
		Monthly total	Rate per working day		
Total applications	128,419	+162.6	+120.6	+207.9	+245.8
New applications	52,265	+109.2	+75.7	+354.6	+325.2
Renewals	76,154	+218.5	+167.6	+152.1	+206.5
Total placements	9,972	+49.3	+25.4	−47.1	−68.6
Private	5,728	+75.3	+47.2	−39.9	+18.8
Public	3,901	+22.4	+2.8	−55.1	−73.2
Relief	343	+53.1	+28.6	−46.0	−97.2
Active file	446,732	+28.9	----------	+43.1	−18.2

Detailed data, by States and geographic divisions, are given in tables 3 and 4.

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TABLE 3.—*Operations of United States Employment Service, March 1938*

TOTAL

Division and State	Placements							New applications		Active file	
		Private				Public					
	Total[1]	Number	Percent of change from February	Regular (over 1 month)	Temporary (1 month or less)	Number	Percent of change from February	Number	Percent of change from February	Mar. 31, 1938	Percent of change from Feb. 28, 1938
United States	177,132	128,887	+40.9	60,523	68,364	45,367	+17.1	805,554	+7.5	6,778,368	+0.3
New England	5,122	4,224	+11.6	2,720	1,504	830	+2.9	58,720	+7.6	673,823	+2.9
Maine	390	233	+17.1	194	39	157	+14.6	7,987	−1.2	51,528	+2.0
New Hampshire	576	518	−17.6	349	169	56	−20.0	4,226	−20.1	44,602	−10.5
Vermont	463	374	+40.6	219	155	89	+97.8	1,799	−.3	19,301	−5.4
Massachusetts	1,275	1,059	+49.4	717	342	215	−23.8	28,475	+29.3	349,480	+8.6
Rhode Island	582	474	+22.5	247	227	60	+252.9	2,350	+55.6	55,880	−2.3
Connecticut	1,836	1,566	−1.8	994	572	253	−1.2	13,883	−12.3	156,032	−1.5
Middle Atlantic	21,053	16,675	+32.0	9,202	7,473	3,425	+.6	269,117	−2.4	1,893,417	+6.7
New York	9,959	8,292	+38.6	4,324	3,968	1,152	−9.4	168,061	−10.8	653,463	+5.8
New Jersey	2,689	2,548	+32.6	1,355	1,193	138	−30.3	15,683	+20.2	221,934	+2.6
Pennsylvania	8,405	5,835	+23.4	3,523	2,312	2,135	+10.5	85,373	+14.9	1,018,020	+8.2
East North Central	29,583	24,959	+31.4	11,758	13,201	4,048	−22.1	129,114	+10.6	1,153,252	−2.2
Ohio	7,297	5,663	+26.5	2,522	3,141	1,521	+22.2	38,142	+24.9	355,309	−.9
Indiana	3,492	3,244	+65.9	1,988	1,256	228	−9.2	18,210	+29.7	126,099	+2.9
Illinois	12,641	11,105	+28.4	4,305	6,800	1,458	−50.8	21,292	+11.8	321,812	−2.6
Michigan	2,293	1,706	+28.8	893	813	356	+10.2	36,884	−8.1	219,709	−3.8
Wisconsin	3,860	3,241	+24.9	2,050	1,191	485	+16.3	14,586	+12.0	130,330	−6.4
West North Central	18,573	12,957	+45.8	6,945	6,012	5,369	+58.4	53,184	+61.7	614,101	+3.9
Minnesota	3,710	3,124	+53.2	1,980	1,144	574	+27.8	21,623	+71.2	183,256	+11.6
Iowa	4,551	3,322	+40.9	1,623	1,699	1,010	+28.8	6,237	+42.1	73,362	+4.0
Missouri	3,695	2,674	+27.2	1,353	1,321	1,021	+64.7	14,460	+73.3	171,407	−.1
North Dakota	1,578	1,360	+80.6	880	480	216	+575.0	1,474	+110.6	30,054	+6.3
South Dakota	877	603	+60.4	317	286	271	+4.2	1,453	+24.6	44,986	−4.8
Nebraska	2,381	1,008	+64.2	494	514	1,368	+126.5	3,789	+57.7	49,406	+5.1
Kansas	1,781	866	+34.1	298	568	909	+41.8	4,148	+26.8	61,630	−.7
South Atlantic	22,819	12,501	+40.8	7,005	5,496	10,029	+20.4	95,737	+17.5	829,410	+2.0
Delaware	576	410	+15.5	152	258	159	+120.8	1,029	+15.6	12,908	+.9
Maryland	1,834	1,312	+61.4	762	550	522	+32.5	16,279	+5.0	107,612	+11.0
District of Columbia	1,782	1,687	+40.6	800	887	95	+97.9	4,963	+37.7	48,903	+14.9
Virginia	3,944	2,227	+24.7	1,677	550	1,577	+72.5	15,644	+9.6	91,191	−.6
West Virginia	1,483	885	+49.5	536	349	561	+8.1	26,216	+52.8	181,196	+16.1
North Carolina	5,903	3,778	+49.7	2,042	1,736	2,093	+39.2	14,941	−10.9	133,938	−13.0
South Carolina	1,468	294	+14.8	122	172	1,169	+20.4	4,119	+3.0	64,297	−3.9
Georgia	4,783	1,907	+41.2	913	994	2,874	+.9	9,551	+43.4	116,038	−3.9
Florida	1,046	1	-------	1	0	979	−7.9	2,995	+14.6	73,327	+2.5
East South Central	13,219	6,572	+92.1	3,355	3,217	6,568	+23.0	42,113	+15.0	428,309	−8.6
Kentucky	1,737	792	+39.9	297	495	903	+85.0	7,786	+53.9	106,295	−4.8
Tennessee	2,963	1,981	+12.4	1,356	625	982	+68.2	9,770	+11.4	145,331	+6.1
Alabama	5,021	3,391	+280.2	1,413	1,965	1,600	+20.7	15,493	−3.4	134,701	−7.1
Mississippi	3,498	408	+102.0	276	132	3,083	+4.8	9,064	+34.7	41,982	−43.9
West South Central	36,010	28,804	+33.7	8,449	20,355	7,110	+20.3	57,195	+2.1	432,750	−16.8
Arkansas	1,841	1,446	+30.7	559	887	382	+33.6	4,187	+56.0	60,011	+4.6
Louisiana	3,336	2,577	+50.4	1,801	776	759	−27.7	12,547	−.9	105,189	+3.1
Oklahoma	2,278	1,704	+64.5	499	1,205	574	−13.8	5,399	+6.1	52,130	−53.5
Texas	28,555	23,077	+30.4	5,590	17,487	5,395	+38.0	35,062	−1.5	215,420	−13.4
Mountain	7,422	4,604	+26.5	2,278	2,326	2,762	+14.7	19,427	+33.0	207,648	+.6
Montana	644	301	+54.4	162	139	341	+62.4	1,816	−.7	32,299	+7.4
Idaho	1,112	745	+44.4	451	294	363	+91.1	1,539	+30.3	14,080	−25.6
Wyoming	565	267	+4.3	133	134	297	+95.4	873	+10.1	9,406	+6.5
Colorado	1,958	1,361	+25.2	649	712	581	−4.3	4,584	+12.9	56,855	−11.9
New Mexico	586	315	+2.3	180	135	269	−37.4	1,398	+20.7	30,855	+8.7
Arizona	1,132	646	−23.7	289	357	457	−13.1	3,008	−6.1	24,956	+5.5
Utah	550	307	+107.4	94	213	241	+49.7	5,661	+205.0	34,642	+26.5
Nevada	875	662	+133.9	320	342	213	+60.2	548	+2.6	4,555	−3.3
Pacific	22,504	17,492	+81.1	8,782	8,710	4,988	+35.3	79,221	−.5	543,182	−1.5
Washington	1,543	992	+85.4	579	413	533	−24.5	7,227	+17.5	97,595	+7.8
Oregon	4,173	3,306	+199.5	2,506	800	861	+64.3	11,816	+8.1	84,425	−6.8
California	16,788	13,194	+64.6	5,697	7,497	3,594	+46.3	60,178	−3.8	361,162	−2.5
Hawaii	827	99	-------	29	70	238	−9.5	1,726	+41.0	2,469	+159.1
Alaska[2]	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

[1] Includes 2,878 security-wage placements on work-relief projects.

[2] Service to public inaugurated Jan. 3, 1938. First report shows for period Jan. 3 to Mar. 19, 552 new applications, 13 private placements, 33 public placements, and active file of 536.

TABLE 3.—*Operations of United States Employment Service, March 1938*—Continued

MEN

Division and State	Placements							New applications		Active file	
		Private				Public					
	Total[1]	Number	Percent of change from February	Regular (over 1 month)	Temporary (1 month or less)	Number	Percent of change from February	Number	Percent of change from February	Mar. 31, 1938	Percent of change from Feb. 28, 1938
United States	**117,639**	**70,527**	**+55.1**	**28,453**	**42,074**	**44,454**	**+18.4**	**601,236**	**+9.3**	**5,381,645**	**+0.9**
New England	**2,532**	**1,696**	**+5.7**	**1,055**	**641**	**793**	**+5.2**	**39,323**	**+14.8**	**489,782**	**+3.0**
Maine	239	87	+13.0	69	18	152	+14.3	5,369	+10.2	39,880	+1.6
New Hampshire	275	227	−33.6	124	103	46	−31.3	2,792	−7.5	30,205	−8.6
Vermont	262	173	+46.6	102	71	89	+102.3	1,193	+3.7	15,111	−6.4
Massachusetts	578	370	+29.4	233	137	207	−25.8	19,594	+35.8	254,438	+8.5
Rhode Island	250	167	+29.5	82	85	60	+300.0	1,339	+59.8	38,819	−2.5
Connecticut	928	672	+3.1	445	227	239	+10.6	9,036	−9.2	111,329	−1.5
Middle Atlantic	**10,989**	**6,829**	**+63.6**	**4,074**	**2,755**	**3,254**	**+7.1**	**193,496**	**−4.1**	**1,489,365**	**+6.1**
New York	4,841	3,229	+65.3	1,953	1,276	1,101	−6.1	119,596	−12.9	501,695	+4.5
New Jersey	896	755	+95.6	489	266	138	−29.9	11,430	+28.7	177,973	+2.5
Pennsylvania	5,252	2,845	+55.0	1,632	1,213	2,015	+20.9	62,470	+12.4	809,697	+8.0
East North Central	**15,014**	**10,546**	**+38.6**	**4,361**	**6,185**	**3,946**	**−22.7**	**102,723**	**+10.5**	**963,597**	**−.9**
Ohio	3,775	2,181	+39.5	765	1,416	1,495	+22.8	30,420	+23.5	299,870	+.4
Indiana	1,382	1,150	+101.8	546	604	214	−9.7	13,991	+33.9	104,279	+3.2
Illinois	6,553	5,057	+33.2	1,843	3,214	1,438	−51.3	14,549	+17.7	258,110	−1.9
Michigan	1,279	700	+38.9	256	444	350	+13.3	32,820	−9.1	197,655	−1.4
Wisconsin	2,025	1,458	+24.1	951	507	449	+15.7	10,943	+16.0	103,683	−4.5
West North Central	**12,230**	**6,733**	**+64.5**	**3,300**	**3,433**	**5,261**	**+59.0**	**41,138**	**+85.8**	**501,922**	**+4.8**
Minnesota	1,952	1,381	+80.3	923	458	559	+27.9	17,425	+107.5	147,143	+13.2
Iowa	2,920	1,712	+47.5	757	955	990	+30.6	4,506	+56.1	60,667	+5.0
Missouri	2,357	1,344	+39.6	536	808	1,013	+64.7	11,089	+94.3	139,833	+.7
North Dakota	1,060	878	+131.1	596	282	181	+722.7	1,054	+149.2	24,001	+7.6
South Dakota	629	369	+74.9	175	194	260	+4.0	998	+31.0	38,430	−4.5
Nebraska	1,912	556	+79.4	221	335	1,353	+128.2	2,884	+75.4	40,665	+5.9
Kansas	1,400	493	+62.7	92	401	905	+43.0	3,182	+37.5	51,183	−.1
South Atlantic	**16,641**	**6,492**	**+56.4**	**3,296**	**3,196**	**9,909**	**+20.9**	**72,944**	**+23.5**	**635,355**	**+3.2**
Delaware	303	141	+34.3	56	85	159	+120.8	726	+14.0	9,867	+.5
Maryland	1,248	744	+93.8	438	306	504	+28.6	11,840	+7.9	83,684	+10.4
District of Columbia	577	494	+67.5	214	280	83	+130.6	3,082	+39.2	34,155	+12.8
Virginia	3,093	1,401	+46.7	1,060	341	1,567	+73.1	11,336	+6.6	68,512	+.8
West Virginia	874	321	+119.9	194	127	522	+13.5	23,231	+63.1	158,257	+17.7
North Carolina	3,995	1,902	+64.8	761	1,141	2,062	+39.7	9,755	−5.4	89,510	−13.2
South Carolina	1,324	154	+2.0	45	109	1,166	+20.3	3,260	+4.3	49,013	−2.4
Georgia	4,205	1,334	+38.8	527	807	2,869	+1.4	7,447	+45.9	88,246	−3.1
Florida	1,022	1	0	1	0	977	−7.4	2,267	+23.9	54,111	+2.4
East South Central	**10,179**	**3,611**	**+94.2**	**1,724**	**1,887**	**6,505**	**+23.3**	**32,786**	**+20.9**	**340,884**	**−6.6**
Kentucky	1,201	305	+57.2	79	226	863	+82.8	5,774	+68.2	85,567	−4.1
Tennessee	1,813	839	−5.7	481	358	974	+68.5	7,534	+23.9	114,226	+7.2
Alabama	3,848	2,234	+250.2	1,019	1,215	1,588	+23.6	12,172	−1.1	106,833	−6.5
Mississippi	3,317	233	+70.1	145	88	3,080	+4.7	7,306	+38.2	34,258	−37.6
West South Central	**27,167**	**20,023**	**+34.3**	**3,794**	**16,229**	**7,050**	**+20.4**	**43,854**	**+1.5**	**351,451**	**−15.4**
Arkansas	1,189	805	+12.9	144	661	371	+33.0	3,221	+86.3	49,552	+4.6
Louisiana	2,247	1,492	+56.2	927	565	755	−28.0	9,934	−1.8	87,620	+3.2
Oklahoma	1,390	823	+69.0	88	735	567	−12.0	4,144	+3.1	44,309	−51.9
Texas	22,341	16,903	+32.6	2,635	14,268	5,357	+37.9	26,555	−2.8	169,970	−11.1
Mountain	**5,378**	**2,619**	**+47.5**	**1,087**	**1,532**	**2,716**	**+15.3**	**15,549**	**+35.3**	**177,144**	**+1.9**
Montana	494	164	+33.3	83	81	328	+66.5	1,507	+0.5	27,525	+8.3
Idaho	731	374	+63.3	178	196	356	+89.4	1,250	+33.0	12,909	−24.1
Wyoming	438	144	+25.2	63	81	294	+93.4	676	+4.0	8,153	+8.6
Colorado	1,335	749	+54.1	279	470	575	−4.3	3,494	+17.4	46,857	−9.6
New Mexico	454	186	+34.8	85	101	266	−35.0	1,131	+25.0	25,917	+9.4
Arizona	730	251	−44.5	109	142	453	−13.1	2,501	−7.6	22,157	+5.3
Utah	435	199	+332.6	40	159	235	+49.7	4,576	+231.1	29,628	+27.0
Nevada	761	552	+196.8	250	302	209	+59.5	414	−3.7	3,998	−2.5
Pacific	**16,708**	**11,902**	**+124.6**	**5,735**	**6,167**	**4,782**	**+41.1**	**57,886**	**+1.3**	**429,965**	**−1.1**
Washington	1,103	558	+120.6	279	279	527	−24.6	5,772	+17.1	86,188	+8.5
Oregon	3,655	2,793	+257.6	2,170	623	856	+67.8	9,470	+8.2	70,306	−8.6
California	11,950	8,551	+100.4	3,286	5,265	3,399	+55.8	42,644	−1.9	273,471	−1.7
Hawaii	**801**	**76**	-------	**27**	**49**	**238**	**−9.5**	**1,537**	**+36.9**	**2,180**	**+155.9**

[1] Includes 2,658 security-wage placements on work-relief projects.

Table 3.—*Operations of United States Employment Service, March 1938*—Continued

WOMEN

Division and State	Placements					New applications		Active file	
	Total [1]	Private				Number	Percent of change from February	Mar. 31, 1938	Percent of change from Feb. 28, 1938
		Number	Percent of change from February	Regular (over 1 month)	Temporary (1 month or less)				
United States	59,493	58,360	+26.9	32,070	26,290	204,318	+2.5	1,396,723	−2.0
New England	2,590	2,528	+15.9	1,665	863	19,397	−4.4	184,041	+2.8
Maine	151	146	+19.7	125	21	2,618	−18.6	11,648	+3.6
New Hampshire	301	291	+1.4	225	66	1,434	−36.9	11,397	−15.1
Vermont	201	201	+35.8	117	84	606	−7.3	4,190	−1.4
Massachusetts	697	689	+62.9	484	205	8,881	+16.8	95,042	+8.9
Rhode Island	332	307	+19.0	165	142	1,011	+50.4	17,061	−1.7
Connecticut	908	894	−5.2	549	345	4,847	−17.6	44,703	−1.7
Middle Atlantic	10,064	9,846	+16.4	5,128	4,718	75,621	+2.1	404,052	+8.8
New York	5,118	5,063	+25.6	2,371	2,692	48,465	−5.3	151,768	+10.9
New Jersey	1,793	1,793	+16.8	866	927	4,253	+2.1	43,961	+2.9
Pennsylvania	3,153	2,990	+3.4	1,891	1,099	22,903	+22.3	208,323	+8.8
East North Central	14,569	14,413	+26.5	7,397	7,016	26,391	+10.7	189,662	−8.5
Ohio	3,522	3,482	+19.5	1,757	1,725	7,722	+30.4	55,439	−7.3
Indiana	2,110	2,094	+51.2	1,442	652	4,219	+17.3	21,820	+1.5
Illinois	6,088	6,048	+24.6	2,462	3,586	6,743	+.9	63,702	−5.5
Michigan	1,014	1,006	+22.5	637	369	4,064	+.6	22,054	−21.1
Wisconsin	1,835	1,783	+25.7	1,099	684	3,643	+1.4	26,647	−13.1
West North Central	6,343	6,224	+29.9	3,645	2,579	12,046	+11.9	112,179	+0
Minnesota	1,758	1,743	+36.9	1,057	686	4,198	−.7	36,113	+5.3
Iowa	1,631	1,610	+34.6	866	744	1,731	+15.2	12,695	−.7
Missouri	1,338	1,330	+16.8	817	513	3,371	+27.9	31,574	−3.5
North Dakota	518	482	+29.2	284	198	420	+51.6	6,053	+1.5
South Dakota	248	234	+41.8	142	92	455	+12.6	6,556	−6.0
Nebraska	469	452	+48.7	273	179	905	+19.2	8,741	+1.2
Kansas	381	373	+8.7	206	167	966	+.9	10,447	−3.4
South Atlantic	6,178	6,009	+27.2	3,709	2,300	22,793	+1.7	194,055	−1.9
Delaware	273	269	+7.6	96	173	303	+19.8	3,041	+2.4
Maryland	586	568	+32.4	324	244	4,439	−2.2	23,928	+13.0
District of Columbia	1,205	1,193	+31.8	586	607	1,881	+35.3	14,748	+20.0
Virginia	851	826	−.6	617	209	4,308	+18.5	22,679	−4.7
West Virginia	609	564	+26.5	342	222	2,985	+2.4	22,939	+5.7
North Carolina	1,908	1,876	+37.0	1,281	595	5,186	−19.7	44,428	−12.5
South Carolina	144	140	+33.3	77	63	859	−1.7	15,284	−8.5
Georgia	578	573	+46.9	386	187	2,104	+35.0	27,792	−6.5
Florida	24	0	----	0	0	728	−7.1	19,216	+2.8
East South Central	3,040	2,961	+89.4	1,631	1,330	9,327	−1.7	87,425	−15.5
Kentucky	536	487	+30.9	218	269	2,012	+23.7	20,728	−7.6
Tennessee	1,150	1,142	+31.0	875	267	2,236	−16.8	31,105	+2.2
Alabama	1,173	1,157	+355.5	407	750	3,321	−11.0	27,868	−9.4
Mississippi	181	175	+169.2	131	44	1,758	+21.7	7,724	−61.1
West South Central	8,843	8,781	+32.2	4,655	4,126	13,341	+4.0	81,299	−22.4
Arkansas	652	641	+63.1	415	226	966	+1.2	10,459	+4.6
Louisiana	1,089	1,085	+43.1	874	211	2,613	+3.0	17,569	+2.6
Oklahoma	888	881	+60.5	411	470	1,255	+17.7	7,821	−60.7
Texas	6,214	6,174	+25.0	2,955	3,219	8,507	+2.8	45,450	−21.3
Mountain	2,044	1,985	+6.4	1,191	794	3,878	+24.1	30,504	−6.3
Montana	150	137	+90.3	79	58	309	−6.4	4,774	+2.8
Idaho	381	371	+29.3	273	98	289	+19.9	1,171	−39.0
Wyoming	127	123	−12.8	70	53	197	+37.8	1,253	−5.3
Colorado	623	612	+1.8	370	242	1,090	+.6	9,998	−21.3
New Mexico	142	129	−24.1	95	34	267	+5.5	4,938	+5.1
Arizona	402	395	0	180	215	507	+2.4	2,799	+7.2
Utah	115	108	+5.9	54	54	1,085	+128.9	5,014	+23.7
Nevada	114	110	+13.4	70	40	134	+28.8	557	−8.5
Pacific	5,796	5,590	+28.3	3,047	2,543	21,335	−5.1	113,217	−3.0
Washington	440	434	+53.9	300	134	1,455	+19.3	11,407	+2.9
Oregon	518	513	+58.8	336	177	2,346	+7.5	14,119	+3.4
California	4,838	4,643	+23.7	2,411	2,232	17,534	−8.2	87,691	−4.7
Hawaii	26	23	----	2	21	189	+87.1	289	+186.1

[1] Includes 913 public placements and 220 security-wage placements on work-relief projects.

TABLE 4.—*Operations of United States Employment Service, March 1938*

VETERANS

Division and State	Placements							New applications		Active file	
		Private				Public					
	Total[1]	Number	Percent of change from February	Regular (over 1 month)	Temporary (1 month or less)	Number	Percent of change from February	Number	Percent of change from February	Mar. 31, 1938	Percent of change from Feb. 28, 1938
United States	**9,972**	**5,728**	**+75.3**	**1,962**	**3,766**	**3,901**	**+22.4**	**52,265**	**+109.2**	**446,732**	**+28.9**
New England	**249**	**142**	**+21.4**	**86**	**56**	**94**	**+36.2**	**3,241**	**+82.2**	**40,338**	**+12.9**
Maine	25	5	0	5	0	20	+300.0	329	+48.2	3,569	+36.8
New Hampshire	28	22	+10.0	12	10	6	+20.0	212	+17.1	2,592	+9.9
Vermont	19	11	+120.0	7	4	8	+300.0	91	+65.5	892	+13.2
Massachusetts	39	16	−5.9	11	5	23	+15.0	1,777	+115.7	23,242	+9.6
Rhode Island	21	15	−6.3	9	6	6	+100.0	236	+521.1	2,707	+16.1
Connecticut	117	73	+35.2	42	31	31	−8.8	596	+29.8	7,336	+13.6
Middle Atlantic	**747**	**409**	**+84.2**	**223**	**186**	**272**	**+26.5**	**12,130**	**+99.4**	**114,855**	**+48.3**
New York	263	155	+76.1	76	79	74	+10.4	3,928	+19.2	23,852	+15.1
New Jersey	84	72	+200.0	37	35	11	−15.4	4,253	+882.2	43,961	+259.7
Pennsylvania	400	182	+65.5	110	72	187	+38.5	3,949	+67.8	47,042	+5.7
East North Central	**1,459**	**937**	**+42.4**	**332**	**605**	**470**	**−20.6**	**11,104**	**+116.1**	**90,074**	**+33.7**
Ohio	437	232	+50.6	59	173	195	+23.4	2,358	+75.3	25,877	+24.8
Indiana	100	85	+73.5	38	47	15	−37.5	1,708	+154.5	10,657	+39.9
Illinois	615	438	+35.2	139	299	175	−48.7	1,869	+220.0	24,390	+27.6
Michigan	114	61	+60.5	22	39	30	+66.7	3,575	+93.3	17,703	+45.9
Wisconsin	193	121	+30.1	74	47	55	+7.8	1,594	+131.0	11,447	+47.4
West North Central	**1,376**	**690**	**+70.4**	**220**	**470**	**571**	**+71.5**	**4,821**	**+255.3**	**48,854**	**+30.8**
Minnesota	170	102	+47.8	63	39	68	+36.0	1,473	+207.5	13,508	+29.1
Iowa	564	287	+69.8	48	239	163	+109.0	645	+210.1	7,044	+40.6
Missouri	171	92	+43.8	38	54	79	+51.9	1,470	+283.8	14,519	+30.4
North Dakota	73	52	+108.0	34	18	21	+320.0	103	+390.5	1,762	+28.0
South Dakota	91	49	+104.2	18	31	42	+82.6	131	+322.6	3,015	+16.9
Nebraska	135	37	+85.0	11	26	98	+78.2	285	+156.8	3,651	+25.9
Kansas	172	71	+108.8	8	63	100	+42.9	714	+475.8	5,355	+37.6
South Atlantic	**1,223**	**544**	**+80.7**	**201**	**343**	**659**	**+29.7**	**4,946**	**+98.2**	**41,272**	**+18.6**
Delaware	34	14	+27.3	7	7	18	+260.0	92	+124.4	953	+42.0
Maryland	146	81	+131.4	36	45	65	+103.1	695	+50.1	6,211	+27.8
District of Columbia	79	59	+63.9	14	45	20	+400.0	346	+78.4	3,022	+.6
Virginia	217	100	+26.6	52	48	109	+84.7	835	+78.8	4,997	+37.7
West Virginia	90	20	+42.9	11	9	67	−6.9	1,007	+62.7	8,087	+19.2
North Carolina	197	105	+87.5	44	61	91	+9.6	536	+63.9	4,278	−5.4
South Carolina	86	8	−50.0	2	6	78	+56.0	210	+89.2	2,685	+6.9
Georgia	309	157	+190.7	35	122	152	−1.3	632	+222.4	6,145	+43.1
Florida	65	0	0	0	0	59	+20.4	593	+660.3	4,894	+8.3
East South Central	**622**	**229**	**+175.9**	**102**	**127**	**387**	**+29.0**	**3,474**	**+212.1**	**24,975**	**+32.9**
Kentucky	143	39	+50.0	4	35	100	+72.4	600	+311.0	7,430	+52.7
Tennessee	142	59	+103.4	32	27	83	+40.7	1,123	+268.2	7,739	+25.4
Alabama	224	118	+353.8	61	57	104	+40.5	1,094	+146.4	7,594	+34.7
Mississippi	113	13	+550.0	5	8	100	−8.3	657	+201.4	2,212	+4.3
West South Central	**1,813**	**1,245**	**+63.4**	**255**	**990**	**542**	**+16.6**	**4,655**	**+123.3**	**28,128**	**+18.8**
Arkansas	115	78	+100.0	12	66	32	+14.3	624	+467.3	4,143	+46.0
Louisiana	175	114	+22.6	49	65	61	−24.7	854	+93.2	6,919	+32.2
Oklahoma	165	110	+77.4	7	103	55	−1.8	705	+206.5	5,377	+.9
Texas	1,358	943	+66.0	187	756	394	+31.3	2,472	+89.7	11,689	+13.8
Mountain	**604**	**298**	**+96.1**	**91**	**207**	**300**	**−5.1**	**1,550**	**+84.7**	**15,912**	**+27.6**
Montana	61	13	+225.0	4	9	47	+88.0	150	+33.9	2,297	+29.4
Idaho	152	88	+166.7	25	63	64	+48.8	182	+139.5	1,578	+21.9
Wyoming	39	9	+80.0	3	6	30	+7.1	77	+37.5	856	+41.5
Colorado	139	73	+128.1	24	49	65	+3.2	425	+53.4	4,499	+17.1
New Mexico	46	21	+110.0	5	16	25	−57.6	154	+340.0	1,926	+27.0
Arizona	80	42	+7.7	9	33	34	−33.3	283	+45.9	2,043	+29.4
Utah	30	10	+25.0	3	7	20	−41.2	243	+305.0	2,336	+48.8
Nevada	57	42	+100.0	18	24	15	+15.4	36	+24.1	377	+31.4
Pacific	**1,828**	**1,232**	**+117.7**	**452**	**780**	**593**	**+54.4**	**6,237**	**+55.8**	**42,136**	**+8.8**
Washington	163	83	+88.6	33	50	77	−20.6	561	+81.6	7,963	+13.3
Oregon	379	263	+292.5	202	61	116	+107.1	1,488	+141.2	5,674	−18.7
California	1,286	886	+94.7	217	669	400	+73.2	4,188	+36.1	28,499	+15.4
Hawaii	**51**	**2**	**0**	**0**	**2**	**13**	**+116.7**	**107**	**+16.3**	**188**	**+123.8**

[1] Includes 343 security-wage placements on work-relief projects.

Trend of Employment and Pay Rolls

SUMMARY OF REPORTS FOR MARCH 1938

EMPLOYMENT showed a further slight decline in March with 79,000 fewer workers on the pay rolls of the manufacturing and the 16 nonmanufacturing industries surveyed monthly by the United States Bureau of Labor Statistics. Weekly pay rolls in these industries were $400,000 smaller than in February.

Compared with March of last year, there were 2,100,000 fewer workers employed by these industries in March 1938 and weekly wage disbursements were $63,600,000 lower.

Class I railroads employed 915,110 workers in March, exclusive of executives, officials, and staff assistants, according to a preliminary report by the Interstate Commerce Commission. This was 11,706 lower than the February figure.

In the executive and judicial services of the Federal Government employment showed small increases over the preceding month, while decreases occurred in the legislative and military services. As employment in industry declined during the month of March, the number of persons engaged in most of the programs financed wholly or partially from Federal funds increased substantially. The most marked increases occurred on projects operated by the W. P. A. and on construction projects financed from regular Federal appropriations. There was a decrease in the number of workers in the Civilian Conservation Corps.

Industrial and Business Employment

Employment declines between February and March were shown by 12 of the 16 nonmanufacturing industries and by 53 of the 89 manufacturing industries covered. Decreased pay rolls were reported for 8 of the nonmanufacturing and 39 of the manufacturing industries.

For manufacturing as a whole there was a falling off in employment of 0.7 percent or 50,000 wage earners, and an increase of 0.1 percent, or $200,000, in weekly wages. The decline in number of workers was contraseasonal and the gain in wage disbursements was less than is usual for this time of year, as the expected March gains are about 1 percent in employment and 2 percent in pay rolls. During the past 19 years for which data are available, employment increases have been shown in March for 16 years and pay-roll gains for 15 years.

As a result of continued declines since August, the Bureau's index of factory employment for March was 81.7 on the basis of 100 for the 3-year period, 1923–25, and was 19.2 percent lower than a year ago. The index of factory pay rolls—73.3—was 27.5 percent below the level of March 1937.

The largest reductions in number of factory workers were reported by the following industries: Woolen and worsted goods (13,800 or 13.1 percent), automobiles (12,000 or 3.7 percent), electrical machinery, apparatus, and supplies (7,700 or 3.8 percent), foundries and machine shops (7,500 or 2.2 percent), blast furnaces, steel works, and rolling mills (6,900 or 2.0 percent), slaughtering and meat packing (4,700 or 4.1 percent), book and job printing (3,200 or 2.6 percent), and canning (3,100 to 4.7 percent).

Most of the increases in manufacturing employment were seasonal in character. The industries taking on the largest number of workers were sawmills (10,500 or 5.5 percent), shirts and collars (4,000 or 6.8 percent), cotton goods (3,100 or 0.8 percent), men's clothing (2,900 or 1.7 percent), women's clothing (2,700 or 1.4 percent), and boots and shoes (2,600 or 1.3 percent). Among other industries showing increases were cement (8.5 percent), millinery (6.0 percent), men's furnishings (5.2 percent), stamped and enameled ware (4.3 percent), stoves (3.6 percent), brick (2.0 percent), and knit goods (0.9 percent).

Four of the sixteen nonmanufacturing industries covered showed employment gains in March. In three of these industries, quarrying and nonmetallic mining, retail trade, and dyeing and cleaning, the increases were somewhat lower than seasonal. Insurance firms reported a gain of 0.2 percent in employment. The employment changes in the more important lines of retail trade were increases of 4.7 percent in wearing apparel, 1.4 percent in general merchandising, and 0.7 percent in lumber and building materials, and decreases of 0.4 percent in food, 0.3 percent in furniture and household furnishings, and 0.8 percent in the automotive group.

Although gains were reported by wholesale dealers in dry goods and apparel, food, and building materials, there was a net decline of 1.4 percent for wholesale trade which represented an estimated loss of 20,800 in number of workers.

There were employment declines of 2.5 percent in bituminous-coal mining, 2.4 percent in metalliferous mining, 2.7 percent in brokerage, 1.2 percent in anthracite mining, 1.2 percent in telephone and telegraph offices, 1.0 percent in year-round hotels, and 1.0 percent in crude-petroleum producing. The decreases in the remaining 4 industries ranged from 0.4 percent to 0.9 percent.

According to a preliminary tabulation by the Interstate Commerce Commission, class I railroads employed 915,110 workers, exclusive of executives, officials, and staff assistants, in March. This figure was 11,706 or 1.3 percent lower than the number reported for February.

March pay rolls were not available when this report was prepared. Pay rolls for February amounted to $130,886,631 as against $142,328,575 for January, a decrease of 8.0 percent.

Hours and earnings.—The average hours worked per week by factory workers was 34.5 in March, a gain of 0.9 percent since February. Average hourly earnings fell 0.3 percent to 65.5 cents, while average weekly earnings climbed 0.9 percent to $22.46.

Of the 14 nonmanufacturing industries for which man-hour data are available, 10 showed increases in average hours worked per week and 4 reported higher average hourly earnings. Higher average weekly earnings were reported by 9 of the 16 nonmanufacturing industries surveyed.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, March 1938 (Preliminary Figures)*

Industry	Employment			Pay roll			Average weekly earnings		
	Index March 1938	Percentage change from—		Index March 1938	Percentage change from—		Average in March 1938	Percentage change from—	
		February 1938	March 1937		February 1938	March 1937		February 1938	March 1937
	(*1923–25 =100*)			(*1923–25 =100*)					
All manufacturing industries combined [1]	81.7	−0.7	−19.2	73.3	+0.1	−27.5	$22.46	+0.9	−10.3
Class I steam railroads [2]	51.9	−1.3	−15.7	[3]	[3]	[3]	[3]	[3]	[3]
	(*1929=100*)			(*1929=100*)					
Coal mining:									
Anthracite [4]	59.3	−1.2	+.5	47.3	+2.7	+15.2	26.01	+3.9	+14.6
Bituminous [4]	93.1	−2.5	−12.2	68.5	−7.4	−33.8	19.57	−5.0	−24.6
Metalliferous mining	61.9	−2.4	−15.4	56.2	+.4	−20.4	28.42	+2.9	−5.9
Quarrying and nonmetallic mining	38.8	+2.7	−20.9	30.2	+5.7	−26.9	19.80	+2.9	−7.6
Crude-petroleum producing	73.8	−1.0	−.9	68.1	−2.1	+6.6	33.77	−1.2	+7.5
Public utilities:									
Telephone and telegraph	74.8	−1.2	−.7	92.3	+3.1	+5.8	$31.65	+4.3	+6.5
Electric light and power and manufactured gas	92.2	−.6	−.2	98.6	+.1	+4.0	$33.79	+.7	+4.2
Electric-railroad and motor-bus operation and maintenance	70.8	−.4	−2.6	69.9	−.4	+1.0	$32.29	0	+3.7
Trade:									
Wholesale	89.1	−1.4	−3.2	74.7	−.8	−.4	$29.09	+.6	+2.9
Retail	82.9	+.6	−6.3	68.6	+.2	−2.7	$21.76	−.3	+3.9
General merchandising	90.0	+1.4	−10.2	82.5	+1.2	−5.8	$18.58	−.2	+4.9
Other than general merchandising	81.0	+.3	−5.1	65.7	−[6]	−1.9	$24.15	−.3	+3.4
Hotels (year-round) [4] [7]	93.4	−1.0	−1.1	81.0	−3.0	+2.9	$14.88	−2.0	+4.1
Laundries [4]	94.8	−.9	−3.8	78.5	−.7	−1.1	17.00	+.2	+2.8
Dyeing and cleaning [4]	98.2	+3.0	−5.8	67.8	+4.4	−5.6	19.27	+1.4	+.3
Brokerage	[3]	−2.7	−17.7	[3]	−4.0	−21.6	$35.15	−1.3	−4.8
Insurance	[3]	+.2	+2.2	[3]	−.3	−1.0	$36.12	−.5	−3.2
Building construction	[3]	−.9	−22.3	[3]	+.2	−17.8	28.44	+1.1	+5.9

[1] Revised indexes; adjusted to 1933 Census of Manufactures.
[2] Preliminary. Source: Interstate Commerce Commission.
[3] Not available.
[4] Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, Employment and Pay Rolls.
[5] Average weekly earnings not strictly comparable with figures published in issues of the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.
[6] Less than 1/10 of 1 percent.
[7] Cash payments only; the additional value of board, room, and tips cannot be computed.

Previous to January 1938, the wording of the definition on the schedules for public utilities, wholesale and retail trade, hotels, and

brokerage and insurance firms called for the inclusion of higher-salaried employees such as corporation officers, executives, and others whose duties are mainly supervisory. These employees have, for the most part, always been excluded from employment reports for other industries, and beginning with that month it was requested that they be omitted also for the industries named above. For this reason, the average hours worked per week, average hourly earnings, and average weekly earnings for these industries are not comparable with the figures in reports earlier than January 1938.

The following table presents employment and pay-roll indexes and average weekly earnings in March 1938 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class I railroads, with percentage changes over the month and year intervals except in the few industries for which data are not available.

Public Employment

From mid-February to mid-March 94,000 men were at work on construction projects financed from funds provided by the Public Works Administration. Compared with the preceding month this was an increase of 2,000. Of the total number 23,000 were working on Federal and non-Federal projects financed from N. I. R. A. funds and 71,000 on projects financed from E. R. A. A. 1935, 1936, and 1937 funds. Pay rolls for the P. W. A. projects were $6,988,000 for the month.

During the period ending in mid-March 157,000 employees were at work on construction projects financed from regular Federal appropriations, an increase of 8 percent compared with February. Increases in employment occurred on all types of projects with the exception of forestry, heavy engineering, and locks and dams. Monthly pay-roll disbursements for all types of projects exceeded $15,167,000.

Projects financed by the Reconstruction Finance Corporation had 3,500 men working during the period from mid-February to mid-March. Increases in the number working were reported on water and sewerage and miscellaneous projects, and a decrease occurred on building construction projects. Pay-roll disbursements for the month exceeded $496,000.

In March there was an increase of 14 percent in the number of employees working on projects of The Works Program exclusive of Student Aid, bringing the total to 2,701,000. Employment on projects operated by the Works Progress Administration reached the highest level (2,392,000) since December 1936. More than 154,000 were at work on Federal projects under The Works Program and 155,000 on work projects of the National Youth Administration. March data for Student Aid projects will not be available until next

month. In February 319,000 were working on Student Aid projects. Exclusive of Student Aid, pay rolls for The Works Program in March totaled $129,606,000.

Employment in the regular services of the Federal Government decreased in the legislative and military services, and increased in the executive and judicial services. Of the 815,000 employees in the executive service in March, 112,000 were working in the District of Columbia and 703,000 outside the District. Force-account employees (employees who are on the Federal pay roll and are engaged on construction projects) were 7 percent of the total number of employees in the executive service. The most marked increases in employment occurred in the Department of Agriculture, the War Department, and the Works Progress Administration. The Navy Department was among those reporting decreases.

In addition to employment in the regular services of the Federal Government, Government and Government-owned corporations with pay rolls for the 6-month period ending December 31, 1937, totaling $20,800,000, employed 25,000 workers as of the last day of the period. Employees of these agencies are not paid directly by and in some cases not hired by the Federal Government. For a similar period employment in the executive service of the Federal Government was 891,000 and pay rolls totaled $767,000,000.

TABLE 2.—*Summary of Federal Employment and Pay Rolls, March 1938* [1] *(Preliminary Figures)*

Class	Employment		Percentage change	Pay rolls		Percentage change
	March	February		March	February	
Federal services:						
Executive [2]	815,445	[3] 809,580	+0.7	$123,765,927	[3] $120,832,841	+2.4
Judicial	2,172	2,156	+.7	520,414	520,473	(4)
Legislative	5,140	5,154	−.3	1,200,002	1,194,905	+.4
Military	331,873	333,624	−.5	25,122,027	24,996,798	+.5
Construction projects:						
Financed by P. W. A. [5]	93,703	91,581	+2.3	6,987,705	7,281,549	−4.0
Financed by R. F. C. [6]	3,525	3,481	+1.3	496,349	513,923	−3.4
Financed by regular Federal appropriations	156,649	144,776	+8.2	15,167,424	14,016,649	+8.2
Federal projects under The Works Program	154,229	147,182	+4.8	7,227,913	7,325,807	−1.3
Projects operated by W. P. A.	2,392,347	2,073,759	+15.4	119,626,230	102,096,059	+17.2
National Youth Administration:						
Works projects	154,567	151,406	+2.1	2,751,797	2,667,226	+3.2
Student Aid	(7)	319,142	.....	(7)	2,157,458	.....
Civilian Conservation Corps	315,086	328,044	−4.0	14,479,801	15,062,322	−3.9

[1] Includes data on projects financed wholly or partially from Federal funds.
[2] Includes force-account and supervisory and technical employees shown under other classifications to the extent of 98,832 employees and pay-roll disbursements of $12,377,247 for March and 97,769 employees and pay-roll disbursements of $11,868,278 for February.
[3] Revised.
[4] Less than 1/10 of 1 percent.
[5] Data covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds are included. These data are not shown under The Works Program. Includes 70,731 wage earners and $4,980,926 pay roll for March; 67,949 wage earners and $5,034,059 pay roll for February covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds.
[6] Includes 100 employees and pay-roll disbursements of $9,484 for March and 107 employees and pay-roll disbursements of $12,984 for February on projects financed by the RFC Mortgage Co.
[7] Not available.

Due to the end of an enlistment period the force of the Civilian Conservation Corps dropped to 315,000 in March, a decrease of 4 percent compared with February. All groups of workers with the exception of nurses showed decreases in the number working. Of the total number in camps 272,000 were enrolled personnel, 5,000 reserve officers, 300 nurses, 1,500 educational advisers, and 36,000 supervisory and technical employees. Monthly pay rolls for all groups of workers totaled $14,480,000.

Virtually the same number of employees (128,000) were working on the construction and maintenance of State roads in March as during the preceding month. Of the total number working on State roads, 91 percent were engaged on maintenance and repair of existing roads and 9 percent on new road construction. Pay-roll disbursements for both types of work amounted to $8,500,000.

A summary of Federal employment and pay-roll statistics for February and March is given in table 2.

DETAILED REPORTS FOR FEBRUARY 1938

Industrial and Business Employment

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of February, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

Figures on employment and pay rolls are available for the following groups: 89 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

Indexes of employment and pay rolls as well as of average hours worked per week, average hourly earnings, and average weekly earnings for December 1937, January 1938, and February 1938, are presented in table 1. The December and January figures may differ in some instances from those previously published because of revisions necessitated by the inclusion of late reports and other causes.

TABLE 1.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, February 1938, January 1938, and December 1937*

MANUFACTURING

[Indexes are based on 3-year average, 1923–25=100, and are adjusted to 1933 Census of Manufactures. Not comparable to indexes published in pamphlets prior to October 1936. Comparable series available on request]

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937
													Cents	*Cents*	*Cents*
All manufacturing industries	82.2	82.2	88.6	73.2	71.6	80.9	$22.32	$21.88	$22.93	34.3	33.2	34.4	65.7	66.3	66.6
Durable goods	73.3	75.1	84.3	63.7	63.8	77.0	23.85	23.26	24.95	33.2	32.3	34.4	72.6	72.7	72.9
Nondurable goods	91.8	89.9	93.3	85.2	81.5	85.8	20.86	20.47	20.68	35.3	34.0	34.3	59.5	60.2	60.0
Durable goods															
Iron and steel and their products, not including machinery	80.0	81.2	90.0	61.4	59.2	71.9	21.54	20.43	22.49	28.9	27.7	30.1	76.0	75.5	76.1
Blast furnaces, steel works, and rolling mills	88.7	90.5	99.6	64.7	61.7	75.5	21.60	20.17	22.47	26.4	24.9	27.3	82.6	81.8	82.8
Bolts, nuts, washers, and rivets	63.3	63.2	73.5	53.0	49.1	66.1	18.94	17.62	20.39	27.0	25.3	29.7	70.2	69.7	68.9
Cast-iron pipe	54.5	55.3	60.2	35.2	36.0	44.3	17.24	17.26	19.65	29.5	29.3	33.7	57.3	58.2	58.1
Cutlery (not including silver and plated cutlery) and edge tools	77.8	77.7	83.9	63.6	63.0	74.6	20.38	20.24	22.32	34.2	33.6	37.5	61.5	62.5	61.2
Forgings, iron and steel	48.4	52.3	60.6	34.3	36.3	49.0	21.58	21.22	24.60	29.2	28.6	33.7	74.2	74.7	73.3
Hardware	67.6	70.8	84.0	60.1	56.3	80.6	20.07	17.94	21.63	30.1	27.4	32.2	66.6	65.1	67.2
Plumbers' supplies	79.7	78.9	79.8	54.0	56.0	55.3	20.59	21.45	21.96	30.8	32.3	32.3	66.9	66.5	67.9
Steam and hot-water heating apparatus and steam fittings	55.9	56.6	61.8	42.4	43.4	49.1	21.94	22.21	22.90	30.9	31.1	32.8	70.6	70.9	69.6
Stoves	73.9	63.8	77.2	56.6	43.9	56.0	22.56	20.21	21.26	34.5	31.8	33.3	66.5	65.0	65.4
Structural and ornamental metalwork	61.4	63.8	69.5	56.2	58.5	68.2	25.74	25.74	27.59	35.8	35.8	38.4	72.0	72.1	72.0
Tin cans and other tinware	85.5	85.7	91.3	88.6	88.1	94.4	22.89	22.93	23.10	36.6	36.7	37.6	63.1	63.2	62.2
Tools (not including edge tools, machine tools, files, and saws)	79.5	81.5	87.6	72.9	75.9	82.4	21.32	21.60	21.96	34.4	34.7	35.2	61.4	62.0	62.2
Wirework	126.0	135.1	161.2	102.1	108.4	136.1	20.38	20.36	21.47	30.4	30.7	31.5	67.1	66.4	68.2
Machinery, not including transportation equipment	99.7	104.0	113.1	91.4	95.5	110.6	25.48	25.52	27.25	34.6	34.4	36.9	73.0	73.2	73.1
Agricultural implements	137.6	138.4	139.6	175.9	172.1	173.5	28.46	27.73	27.67	38.2	37.1	37.3	74.6	74.8	74.4
Cash registers, adding machines, and calculating machines	127.6	126.8	129.0	123.4	128.5	137.9	29.30	30.71	33.05	36.3	37.8	39.6	81.1	81.6	84.1
Electrical machinery, apparatus, and supplies	89.9	95.9	104.7	81.7	88.1	102.9	24.88	25.17	27.01	33.3	33.5	36.1	74.5	74.9	74.8
Engines, turbines, tractors, and water wheels	124.5	130.4	141.2	120.0	128.2	143.6	29.59	30.15	31.32	35.7	36.3	37.9	83.4	83.2	82.9

Electrical machinery, apparatus, and supplies	89.9	95.9	104.7	81.7	88.1	102.9	24.88	25.17	27.01	33.3	33.5	36.1	74.5	74.9	74.8	
Engines, turbines, tractors, and water wheels	124.5	130.4	141.2	120.0	128.2	143.6	29.59	30.15	31.32	35.7	36.3	37.9	83.4	83.2	82.9	
Foundry and machine-shop products	87.1	90.3	98.1	76.8	79.1	93.0	24.85	24.46	26.47	34.8	34.1	37.0	71.2	71.4	71.3	
Machine tools	133.7	139.2	148.1	120.4	131.5	149.0	27.64	29.01	31.03	38.0	39.7	42.2	72.8	73.2	73.5	
Radios and phonographs	95.4	97.1	124.0	71.6	76.2	98.7	19.99	20.81	20.90	31.7	32.7	33.2	62.8	63.8	63.0	
Textile machinery and parts	65.9	68.6	73.7	51.6	53.4	63.4	21.61	21.27	23.53	32.4	32.8	35.7	66.9	65.0	66.1	
Typewriters and parts	114.1	117.7	127.0	87.6	76.8	106.6	20.50	17.41	22.40	31.2	27.1	35.2	65.6	64.1	63.7	
Transportation equipment	**80.6**	**84.3**	**105.5**	**67.0**	**68.6**	**92.4**	**26.86**	**26.23**	**27.40**	**30.4**	**29.7**	**31.2**	**88.6**	**88.7**	**88.1**	
Aircraft	776.2	771.5	781.0	698.9	674.9	700.7	28.64	27.79	28.06	10.4	39.4	39.8	71.6	71.3	70.4	
Automobiles	82.8	86.8	112.9	62.3	63.8	90.8	25.85	25.15	26.44	28.2	27.4	29.2	91.7	91.9	90.5	
Cars, electric- and steam-railroad	42.2	44.5	55.8	47.9	48.9	65.0	27.25	26.41	27.93	36.1	35.4	36.9	75.6	74.6	75.7	
Locomotives	47.9	52.2	59.5	37.0	37.7	53.7	29.63	28.11	35.15	38.3	36.4	43.5	77.3	77.2	80.8	
Shipbuilding	95.2	99.2	104.8	109.5	114.2	126.5	31.15	31.21	32.69	36.2	36.1	37.9	84.3	84.8	85.0	
Railroad repair shops	**44.9**	**47.6**	**52.7**	**45.6**	**47.3**	**55.7**	**29.44**	**28.87**	**30.48**	**40.3**	**39.4**	**41.5**	**72.3**	**72.8**	**73.3**	
Electric railroad	62.1	63.1	63.5	68.5	68.4	70.1	31.19	30.61	31.38	44.1	43.5	44.8	69.6	69.4	68.6	
Steam railroad	43.6	46.4	51.9	44.0	45.9	54.7	29.07	28.52	30.33	39.9	39.0	41.2	72.6	73.1	73.7	
Nonferrous metals and their products	**87.6**	**88.4**	**98.9**	**73.5**	**73.3**	**86.5**	**22.70**	**22.49**	**23.49**	**33.9**	**33.1**	**35.1**	**67.0**	**67.6**	**66.5**	
Aluminum manufactures	101.6	103.9	114.1	97.2	96.9	110.7	23.69	23.11	24.18	34.6	33.5	35.3	68.5	69.1	68.6	
Brass, bronze, and copper products	87.3	89.1	97.0	70.2	71.4	80.3	22.77	22.73	23.36	30.6	30.8	31.9	74.3	73.8	73.0	
Clocks and watches and time-recording devices	104.1	99.8	115.3	91.3	88.8	105.3	20.19	20.42	20.72	33.6	33.6	35.4	60.0	60.7	58.5	
Jewelry	84.1	82.2	89.9	61.4	60.5	70.6	22.26	22.52	23.52	36.9	36.3	38.2	60.3	61.9	61.3	
Lighting equipment	65.8	69.2	87.1	55.2	52.7	72.1	21.64	19.54	21.31	32.0	28.8	31.7	67.5	67.9	67.5	
Silverware and plated ware	71.1	69.3	76.1	57.0	54.0	67.7	21.80	21.11	24.18	34.6	33.2	37.7	63.2	63.6	64.1	
Smelting and refining—copper, lead, and zinc	76.8	81.1	85.3	69.2	74.0	80.2	26.52	26.92	27.73	38.7	39.1	40.2	68.5	68.9	69.0	
Stamped and enameled ware	105.5	105.2	122.6	92.9	88.6	114.7	21.54	20.64	21.69	34.2	31.8	35.0	63.0	64.6	61.8	
Lumber and allied products	**54.3**	**53.7**	**58.1**	**45.5**	**42.5**	**48.4**	**18.86**	**17.66**	**18.62**	**36.1**	**34.6**	**36.3**	**52.6**	**51.6**	**51.3**	
Furniture	68.1	68.5	74.5	53.2	49.4	60.0	18.69	17.16	19.27	34.6	31.8	36.0	54.0	53.8	53.7	
Lumber:																
Millwork	46.2	44.1	47.6	40.2	36.5	42.8	19.99	18.85	20.38	36.9	34.0	37.0	54.1	55.3	55.2	
Sawmills	40.2	39.7	42.8	33.1	31.5	33.9	18.62	17.70	17.56	36.8	36.5	36.4	51.4	49.3	48.8	
Stone, clay, and glass products	**55.0**	**55.1**	**63.2**	**46.4**	**43.4**	**54.5**	**21.50**	**19.97**	**21.86**	**33.2**	**31.1**	**33.8**	**64.9**	**65.1**	**64.9**	
Brick, tile, and terra cotta	35.4	35.3	41.1	25.5	24.3	30.8	17.26	16.53	17.95	32.1	31.2	33.8	53.5	54.1	53.5	
Cement	49.3	50.2	60.5	44.7	44.4	58.0	22.99	22.45	24.34	33.7	32.8	36.1	68.3	68.4	67.4	
Glass	85.4	87.6	100.0	79.1	76.2	95.8	22.56	20.89	23.01	32.4	29.8	32.4	69.9	70.4	71.2	
Marble, granite, slate, and other products	35.0	31.9	38.0	28.9	23.7	30.8	24.91	22.26	23.64	36.0	32.9	35.1	69.7	67.9	67.5	
Pottery	70.5	69.7	74.1	58.9	51.3	59.7	22.10	19.43	21.19	34.7	32.1	34.9	64.8	64.0	63.1	
Nondurable goods																
Textiles and their products	**89.1**	**84.6**	**88.2**	**74.3**	**65.3**	**68.7**	**16.40**	**15.31**	**15.42**	**32.4**	**30.2**	**30.3**	**51.1**	**51.1**	**51.1**	
Fabrics	81.7	80.6	84.0	69.3	64.8	68.9	15.83	15.02	15.36	32.8	30.7	31.4	48.5	48.9	49.0	
Carpets and rugs	72.5	66.9	78.3	54.6	45.6	54.4	17.92	16.24	16.50	27.3	24.6	25.6	65.6	65.9	64.4	
Cotton goods	85.8	86.6	89.0	71.2	70.3	74.1	12.99	12.73	13.13	31.4	30.2	30.9	41.3	42.0	42.3	
Cotton small wares	80.6	78.8	84.9	75.8	67.9	74.9	17.44	15.96	16.47	36.4	33.1	33.5	48.1	48.7	50.0	
Dyeing and finishing textiles	104.8	103.6	105.3	89.5	83.9	86.5	20.63	19.59	19.81	37.3	34.2	34.0	55.1	56.9	58.0	
Hats, fur-felt	83.7	82.7	83.5	72.6	65.2	64.9	23.58	21.40	21.13	33.6	31.2	30.8	71.9	72.0	70.6	
Knit goods	103.1	98.8	103.3	102.9	89.7	95.1	17.40	15.64	16.00	33.8	30.8	31.7	52.7	51.9	51.3	
Silk and rayon goods	59.4	57.8	63.2	45.7	40.4	48.1	14.87	13.55	14.75	33.3	29.5	32.0	44.2	45.5	46.0	
Woolen and worsted goods	59.8	59.1	61.1	50.3	48.9	49.6	19.32	18.97	18.69	33.0	32.0	31.7	58.6	59.4	59.2	

See footnotes at end of table.

TABLE 1.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, February 1938, January 1938, and December 1937*—Continued

MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937	February 1938	January 1938	December 1937
Nondurable goods—Continued															
Textiles and their products—Continued.													*Cents*	*Cents*	*Cents*
Wearing apparel	103.9	91.7	95.6	81.1	63.7	65.2	$17.94	$16.13	$15.60	31.8	28.9	28.2	56.0	55.8	55.3
Clothing, men's	94.9	83.2	84.0	73.3	58.2	55.5	18.14	16.44	15.61	29.4	26.7	25.2	60.7	62.1	62.4
Clothing, women's	144.0	128.3	131.0	108.4	82.8	86.0	20.84	17.87	17.85	33.2	29.9	29.4	59.3	56.8	56.8
Corsets and allied garments	86.4	84.4	87.6	84.1	74.7	79.7	15.99	14.99	14.85	35.6	32.3	32.0	45.2	46.9	46.7
Men's furnishings	115.2	97.6	118.8	88.3	66.5	89.8	13.41	12.05	13.16	32.1	29.2	31.5	37.6	37.8	36.6
Millinery	55.8	50.1	44.1	43.6	34.4	27.4	22.53	20.02	18.00						
Shirts and collars	103.7	89.3	106.3	84.4	70.9	87.3	12.14	11.87	12.11	32.0	30.3	30.2	39.7	41.7	41.0
Leather and its manufactures	89.4	85.8	81.8	73.5	65.6	58.4	19.05	17.96	16.61	36.0	33.4	31.1	52.6	53.6	53.6
Boots and shoes	93.7	89.3	83.8	72.3	63.1	53.2	18.13	16.94	15.25	35.9	32.9	30.1	50.3	51.4	51.1
Leather	77.6	76.6	78.6	80.2	76.9	78.5	23.11	22.43	22.23	36.6	35.4	35.2	63.4	63.8	63.8
Food and kindred products	101.5	102.7	107.3	104.2	106.4	110.4	24.74	25.22	24.93	40.7	40.4	40.5	60.9	61.8	61.2
Baking	129.7	129.6	131.6	126.0	125.0	127.4	25.35	25.18	25.22	43.7	41.5	41.4	58.3	61.2	61.3
Beverages	189.8	186.2	187.4	209.1	199.8	202.0	32.35	31.33	31.65	38.6	37.7	37.9	84.3	83.8	84.4
Butter	80.7	80.5	81.6	66.4	65.7	65.8	22.83	22.54	22.27						
Canning and preserving	79.2	81.9	89.1	77.7	79.4	86.6	16.30	16.12	16.22	34.4	34.3	33.6	48.8	48.3	49.6
Confectionery	75.8	76.4	87.2	74.1	73.8	86.8	17.67	17.58	18.11	37.0	36.8	39.7	47.7	48.0	45.6
Flour	73.6	73.7	75.1	73.1	73.3	74.0	25.87	25.86	25.52	43.1	43.4	42.7	58.9	58.6	58.9
Ice cream	61.6	61.3	63.7	57.7	57.8	60.4	28.89	29.24	29.25	45.5	45.4	46.6	61.9	62.6	61.7
Slaughtering and meat packing	88.0	92.8	90.9	95.9	108.3	104.7	27.32	29.30	28.89	39.7	42.7	42.2	68.9	68.8	68.0
Sugar, beet	31.6	33.9	146.1	42.0	40.8	135.8	31.43	28.37	21.98	41.8	38.8	40.4	76.1	76.0	55.6
Sugar refining, cane	71.3	65.6	75.0	64.1	58.9	72.4	23.75	23.72	26.87	38.4	38.1	43.0	61.9	59.6	60.8
Tobacco manufactures	58.8	51.9	60.8	48.8	44.6	55.7	15.32	15.85	16.88	33.1	33.3	37.1	46.0	47.6	45.5
Chewing and smoking tobacco and snuff	58.8	57.2	56.9	68.2	66.6	67.9	17.27	17.31	18.11	35.4	34.7	35.8	49.1	50.3	51.1
Cigars and cigarettes	58.7	51.1	61.2	46.4	41.9	54.2	14.89	15.48	16.62	32.8	33.1	37.3	45.5	47.2	44.9
Paper and printing	101.1	101.0	104.1	96.5	95.6	100.8	27.40	26.96	27.62	37.4	36.8	37.6	75.9	76.2	76.5
Boxes, paper	89.8	89.3	96.9	87.6	83.1	92.8	20.16	19.25	19.78	36.9	35.2	37.3	55.1	55.1	53.4
Paper and pulp	108.7	108.2	109.4	103.2	98.0	98.8	23.51	22.41	22.47	37.7	35.9	35.6	62.4	62.4	63.1
Printing and publishing:															
Book and job	95.2	95.8	98.0	89.1	91.0	95.9	29.59	29.95	30.75	38.0	38.4	39.7	78.5	79.3	78.3
Newspapers and periodicals	103.2	103.1	106.6	100.7	100.8	108.4	36.63	36.75	38.45	36.6	36.7	37.7	96.6	96.9	99.1
Chemicals and allied products, and petroleum refining	113.1	112.5	116.3	119.1	117.4	124.4	27.55	27.19	27.93	37.2	36.6	38.0	74.3	75.2	74.3
Other than petroleum refining	111.9	111.0	115.4	113.7	112.2	120.3	24.22	24.22	25.06	37.5	37.1	38.5	65.9	66.8	66.2
Chemicals	115.5	118.3	122.6	123.1	124.8	130.4	29.45	29.25	29.51	37.3	36.8	37.4	79.0	79.7	78.9
Cottonseed—oil, cake, and meal	100.3	104.4	109.9	90.8	96.8	104.8	13.05	13.18	13.48	52.7	53.2	55.0	24.8	25.0	24.7
							23.79	24.37	24.40	38.7	39.0	39.8	59.1	60.0	57.7

Cottonseed—oil, cake, and meal	100.3	104.4	109.9	90.8	96.8	104.8	13.05	13.18	13.48	52.7	53.2	55.0	24.8	25.0	24.7
Druggists' preparations	106.0	105.9	110.5	115.9	118.4	124.0	23.79	24.37	24.40	38.7	39.0	39.8	59.1	60.0	57.7
Explosives	87.4	90.2	94.7	92.4	82.3	100.3	30.25	26.11	29.48	37.5	33.0	37.8	80.7	79.0	78.0
Fertilizers	93.3	82.6	81.6	86.8	78.5	82.3	15.62	16.17	16.74	38.5	37.6	38.2	40.6	43.0	43.9
Paints and varnishes	116.0	116.3	121.1	110.5	106.4	116.1	26.26	25.16	26.40	37.6	35.9	37.8	69.7	70.1	69.9
Rayon and allied products	329.2	315.2	336.8	283.4	275.5	313.5	21.26	21.58	22.98	32.6	32.9	35.3	65.3	65.7	65.1
Soap	96.3	94.0	94.6	111.2	109.2	111.2	28.58	28.65	28.58	38.6	38.4	38.7	74.3	74.8	74.3
Petroleum refining	117.8	118.8	120.2	136.6	134.3	137.9	35.23	34.31	34.88	36.4	35.2	36.3	97.6	98.1	97.1
Rubber products	**74.3**	**78.3**	**86.0**	**58.9**	**65.9**	**77.1**	**21.05**	**22.41**	**23.90**	**28.4**	**29.0**	**31.1**	**77.3**	**79.2**	**78.9**
Rubber boots and shoes	55.8	59.2	68.0	39.8	44.3	54.6	17.86	18.76	20.08	29.5	30.7	33.6	60.5	61.1	59.8
Rubber goods, other than boots, shoes, tires, and inner tubes	109.2	108.6	120.9	97.4	94.9	110.9	20.42	19.99	21.15	34.3	32.9	34.5	59.7	60.7	61.3
Rubber tires and inner tubes	65.0	71.3	76.6	50.1	61.1	70.8	22.54	25.09	26.91	23.6	26.0	28.0	95.1	96.7	96.7

NONMANUFACTURING

[Indexes are based on 12-month average 1929=100]

Coal mining:															
Anthracite [1]	60.0	59.6	61.4	46.1	46.5	51.3	$24.86	$25.27	$27.02	26.5	27.0	28.9	93.1	92.3	92.0
Bituminous [1]	95.4	96.8	99.4	74.0	70.2	95.1	20.59	19.26	25.49	23.7	21.6	29.1	87.1	87.1	86.6
Metalliferous mining	63.4	67.4	70.4	55.9	58.9	65.1	27.48	27.24	29.43	40.9	40.6	43.1	67.3	67.4	68.6
Quarrying and nonmetallic mining	38.2	38.8	43.9	28.9	28.2	33.4	19.19	18.66	19.32	34.9	33.4	34.7	54.9	55.8	55.8
Crude-petroleum producing	74.6	75.3	76.5	69.4	68.2	69.8	34.43	33.80	34.11	40.0	39.5	40.1	86.2	84.3	83.8
Public utilities:															
Telephone and telegraph [3]	75.7	77.8	78.0	89.5	93.7	94.7	30.19	30.76	31.00	37.9	39.5	39.2	84.4	82.6	83.8
Electric light and power and manufactured gas [3]	92.9	94.0	96.1	98.5	98.9	102.4	33.60	33.47	33.91	40.0	39.3	40.4	84.4	85.5	84.2
Electric-railroad and motorbus operation and maintenance [3]	71.1	72.2	72.8	70.5	70.9	71.9	32.23	32.11	32.29	45.4	45.0	45.8	69.9	70.0	69.4
Trade:															
Wholesale [3]	90.4	90.9	93.3	75.3	75.3	77.8	29.08	28.95	29.14	42.2	42.1	42.7	68.6	68.3	68.4
Retail [3]	82.6	84.1	100.4	68.5	70.1	80.6	21.63	21.43	19.94	42.9	43.1	43.1	54.3	54.5	52.4
General merchandising [3]	89.7	91.5	145.9	81.5	84.6	123.3	18.50	18.37	16.79	39.3	39.9	40.9	48.8	48.9	45.5
Other than general merchandising [3]	80.7	82.1	88.5	65.8	67.1	71.8	24.03	23.92	23.74	43.9	44.0	44.1	55.8	56.1	55.4
Hotels (year round) [2] [3] [4]	94.4	94.3	94.9	83.5	81.5	82.6	15.16	14.90	15.00	47.2	46.6	46.6	31.7	31.1	31.3
Laundries [2]	95.7	96.7	97.0	79.1	80.1	81.1	16.96	17.04	17.03	41.8	41.8	42.0	40.8	41.0	40.5
Dyeing and cleaning [2]	95.4	96.7	99.2	65.0	65.3	68.6	18.98	18.66	19.09	39.4	39.0	40.2	49.3	49.2	49.1
Brokerage [3] [6]	−2.3	−1.9	−1.6	−2.3	−3.4	−2.6	36.11	36.23	36.79	(4)	(4)	(4)	(4)	(4)	(4)
Insurance [3] [6]	−.1	+1.0	+.2	−2.0	+.8	−.8	36.29	37.38	37.45	(5)	(4)	(4)	(4)	(4)	(4)
Building construction [6]	−4.8	−14.2	−17.2	−4.7	−15.2	−22.7	28.56	28.36	28.53	30.4	30.5	30.9	93.8	92.5	91.9

[1] Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a small number of establishments as all reporting firms do not furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

[2] Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of Employment and Pay Rolls.

[3] Average weekly earnings, hourly earnings, and hours not strictly comparable with figures published prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

[4] Not available.

[5] Cash payments only; the additional value of board, room, and tips cannot be computed.

[6] Indexes of employment and pay rolls not available; percentage changes from preceding month substituted.

Average weekly earnings shown in table 1 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As all reporting establishments do not supply man-hour data, average hours worked per week and average hourly earnings are necessarily based on data supplied by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to month and therefore the average hours per week, average hourly earnings, and average weekly earnings shown in table 1 are not strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown.

INDEXES OF EMPLOYMENT AND PAY ROLLS

Indexes of employment and pay rolls are given in tables 2 and 3 for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for 13 nonmanufacturing industries, including 2 subgroups under retail trade, by months, from January 1937 to February 1938, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to February 1938.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover wage earners only. The base used in computing these indexes is the 3-year average 1923–25 as 100. In February 1938 reports were received from 25,107 manufacturing establishments employing 3,989,185 workers, whose weekly earnings were $89,064,288. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 89 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum producing they cover wage earners and clerical field force.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

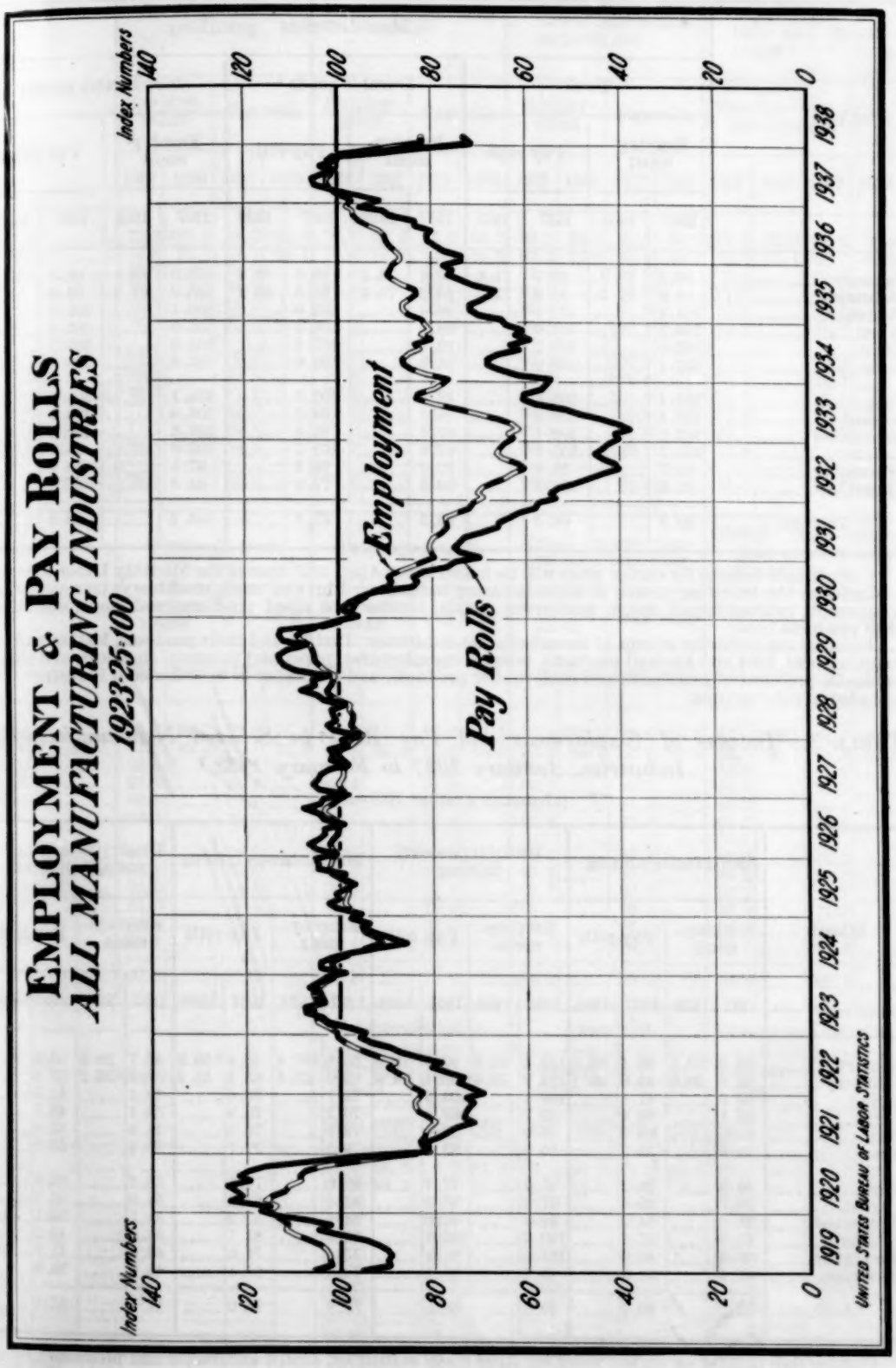
EMPLOYMENT & PAY ROLLS
ALL MANUFACTURING INDUSTRIES
1923-25=100
Index Numbers
140
120
100
80
60
40
20
0
Employment
Pay Rolls
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 2.—*Indexes of Employment and Pay Rolls in All Manufacturing Industries Combined and in the Durable- and Nondurable-Goods Groups* [1]

[Adjusted to 1933 Census of Manufactures—3-year average 1923=100]

Month	Manufacturing											
	Total				Durable goods [2]				Nondurable goods [3]			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	96.5	82.2	90.7	71.6	90.4	75.1	86.6	63.8	103.0	89.9	96.0	81.5
February	99.0	82.2	95.8	73.2	93.2	73.3	92.5	63.7	105.2	91.8	99.9	85.2
March	101.1	.....	101.1	.....	96.4	.....	100.0	.....	106.1	.....	102.6	.....
April	102.1	.....	104.9	.....	98.6	.....	106.4	.....	105.9	.....	102.9	.....
May	102.3	.....	105.2	.....	99.9	.....	107.5	.....	104.8	.....	102.3	.....
June	101.1	.....	102.9	.....	98.8	.....	104.6	.....	103.5	.....	100.8	.....
July	101.4	.....	100.4	.....	98.9	.....	100.7	.....	104.1	.....	100.0	.....
August	102.3	.....	103.8	.....	98.1	.....	104.0	.....	106.9	.....	103.5	.....
September	102.1	.....	100.1	.....	97.3	.....	99.4	.....	107.3	.....	100.9	.....
October	100.5	.....	100.1	.....	97.6	.....	101.7	.....	103.6	.....	98.2	.....
November	94.7	.....	89.5	.....	92.4	.....	89.9	.....	97.3	.....	89.0	.....
December	88.6	.....	80.9	.....	84.3	.....	77.0	.....	93.3	.....	85.8	.....
Average	99.3	.....	98.0	.....	95.5	.....	97.5	.....	103.4	.....	98.5	.....

[1] Comparable indexes for earlier years will be found in the April 1937 issue of the Monthly Labor Review.
[2] Includes the following groups of manufacturing industries: Iron and steel; machinery; transportation equipment; railroad repair shops; nonferrous metals; lumber and allied products; and stone, clay, and glass products.
[3] Includes the following groups of manufacturing industries: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

TABLE 3.—*Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1937 to February 1938* [1]

[12-month average 1929=100]

Month	Anthracite mining				Bituminous-coal mining				Metalliferous mining				Quarrying and nonmetallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	65.2	59.6	46.4	46.5	104.5	96.8	93.6	70.2	66.8	[2] 67.4	58.4	[2] 58.9	45.7	38.8	34.6	28.2
February	63.6	60.0	44.6	46.1	104.7	95.4	96.4	74.0	69.6	63.4	63.4	55.9	46.7	38.2	37.8	28.9
March	59.0	.....	41.1	.....	106.1	.....	103.5	.....	73.1	.....	70.6	.....	49.1	.....	41.3	.....
April	65.1	.....	69.4	.....	89.7	.....	63.6	.....	76.2	.....	76.9	.....	53.1	.....	48.1	.....
May	61.5	.....	48.2	.....	96.1	.....	79.4	.....	78.5	.....	79.8	.....	54.9	.....	51.4	.....
June	61.6	.....	55.3	.....	96.2	.....	83.3	.....	79.5	.....	77.7	.....	55.4	.....	52.6	.....
July	54.3	.....	38.2	.....	93.7	.....	77.7	.....	82.0	.....	77.8	.....	55.5	.....	50.8	.....
August	49.7	.....	29.6	.....	97.4	.....	86.3	.....	83.4	.....	83.0	.....	54.9	.....	53.2	.....
September	58.1	.....	34.2	.....	99.4	.....	90.9	.....	84.1	.....	82.2	.....	54.7	.....	50.1	.....
October	61.5	.....	55.4	.....	102.4	.....	100.7	.....	82.9	.....	81.7	.....	53.3	.....	49.3	.....
November	60.9	.....	49.0	.....	101.4	.....	91.1	.....	75.4	.....	71.6	.....	49.9	.....	41.7	.....
December	61.4	.....	51.3	.....	99.4	.....	95.1	.....	70.4	.....	65.1	.....	43.9	.....	35.4	.....
Average	60.2	.....	46.9	.....	99.3	.....	88.5	.....	76.8	.....	74.0	.....	51.4	.....	45.4	.....

[1] Comparable indexes for earlier years for all of these industries, except anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning, will be found in the February 1935 and subsequent issues of the Monthly Labor Review. Indexes for anthracite and bituminous-coal mining, year-round hotels, laundries, and dyeing and cleaning from January 1929 forward have been adjusted to the 1935 census and are presented in the January 1938 issue of Employment and Pay Rolls.
[2] Revised.

TABLE 3.—*Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1937 to February 1938*—Continued

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power, and manufactured gas				Electric-railroad and motorbus operation and maintenance [3]			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	72.7	[1]75.3	61.2	[1]68.2	74.4	77.8	83.6	[1]93.7	92.1	94.0	92.3	98.9	72.5	72.2	68.0	70.9
February	73.5	74.6	64.1	69.4	74.8	75.7	82.2	89.6	92.2	92.9	93.6	98.5	72.5	71.1	68.7	70.5
March	74.2	-----	63.9	-----	75.4	-----	87.2	-----	92.4	-----	94.8	-----	72.6	-----	69.2	-----
April	75.8	-----	67.7	-----	76.6	-----	86.3	-----	93.1	-----	95.5	-----	72.9	-----	69.4	-----
May	76.7	-----	68.2	-----	77.7	-----	89.5	-----	94.6	-----	97.9	-----	73.3	-----	70.1	-----
June	78.5	-----	70.4	-----	78.5	-----	88.6	-----	96.3	-----	100.4	-----	73.3	-----	71.1	-----
July	78.5	-----	70.5	-----	79.7	-----	92.1	-----	97.5	-----	102.2	-----	73.4	-----	70.8	-----
August	79.3	-----	70.8	-----	79.8	-----	92.1	-----	98.3	-----	102.6	-----	73.4	-----	73.1	-----
September	78.2	-----	71.2	-----	79.8	-----	92.3	-----	98.6	-----	104.0	-----	73.7	-----	71.6	-----
October	77.5	-----	69.9	-----	79.6	-----	94.9	-----	98.5	-----	105.3	-----	73.4	-----	71.4	-----
November	77.2	-----	70.2	-----	78.9	-----	91.4	-----	97.3	-----	103.8	-----	73.2	-----	71.8	-----
December	76.5	-----	69.8	-----	78.0	-----	94.7	-----	96.1	-----	102.4	-----	72.8	-----	71.9	-----
Average	76.5	-----	68.2	-----	77.8	-----	89.6	-----	95.6	-----	99.6	-----	73.1	-----	70.6	-----

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	90.7	[1]91.0	72.6	[1]75.4	85.4	[1]84.1	68.0	[1]70.1	95.1	[1]91.5	83.8	[1]84.6	82.9	[1]82.1	64.7	[1]67.1
February	92.0	90.4	74.1	75.3	85.2	82.6	67.9	68.5	93.9	89.7	82.9	81.5	82.9	80.7	64.8	65.8
March	92.1	-----	75.0	-----	88.5	-----	70.5	-----	100.3	-----	87.6	-----	85.4	-----	67.0	-----
April	91.9	-----	75.4	-----	88.8	-----	71.9	-----	99.6	-----	89.1	-----	86.0	-----	68.3	-----
May	90.8	-----	76.1	-----	89.9	-----	73.5	-----	102.1	-----	91.5	-----	86.7	-----	69.8	-----
June	90.3	-----	76.3	-----	90.5	-----	74.4	-----	102.9	-----	92.5	-----	87.2	-----	70.6	-----
July	90.6	-----	76.9	-----	87.6	-----	72.8	-----	95.9	-----	87.3	-----	85.4	-----	69.8	-----
August	91.8	-----	79.0	-----	86.2	-----	72.3	-----	93.8	-----	85.7	-----	84.2	-----	69.5	-----
September	93.0	-----	78.3	-----	90.7	-----	74.4	-----	103.7	-----	92.4	-----	87.3	-----	70.7	-----
October	94.0	-----	79.3	-----	92.1	-----	75.9	-----	108.1	-----	96.2	-----	87.9	-----	71.7	-----
November	93.5	-----	78.3	-----	91.7	-----	75.3	-----	109.8	-----	97.1	-----	86.9	-----	70.8	-----
December	93.3	-----	77.8	-----	100.4	-----	80.6	-----	145.9	-----	123.3	-----	88.5	-----	71.8	-----
Average	92.0	-----	76.6	-----	89.8	-----	73.1	-----	104.3	-----	92.5	-----	85.9	-----	69.1	-----

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938	1937	1938
January	92.9	94.3	76.2	81.5	98.3	96.7	78.2	80.1	98.8	96.7	64.7	65.3
February	93.9	94.4	78.5	83.5	98.4	95.7	78.1	79.1	98.0	95.4	63.6	65.0
March	94.4	-----	78.7	-----	98.5	-----	79.3	-----	104.3	-----	71.8	-----
April	96.1	-----	80.7	-----	98.3	-----	80.4	-----	109.2	-----	80.1	-----
May	95.3	-----	79.7	-----	100.3	-----	83.3	-----	113.9	-----	86.1	-----
June	94.4	-----	80.1	-----	103.9	-----	87.5	-----	118.5	-----	92.2	-----
July	93.6	-----	79.4	-----	105.8	-----	89.0	-----	111.0	-----	79.5	-----
August	94.3	-----	80.5	-----	104.7	-----	88.0	-----	110.3	-----	81.3	-----
September	95.7	-----	82.4	-----	104.1	-----	86.4	-----	112.8	-----	85.7	-----
October	96.9	-----	84.1	-----	99.9	-----	83.4	-----	110.5	-----	83.6	-----
November	96.6	-----	84.3	-----	97.8	-----	81.1	-----	103.5	-----	73.7	-----
December	94.9	-----	82.6	-----	97.0	-----	81.1	-----	99.2	-----	68.6	-----
Average	94.9	-----	80.6	-----	100.6	-----	83.0	-----	107.5	-----	77.6	-----

[1] Revised.
[3] Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in January and February 1938, is shown in table 4 for all groups combined, and for all manufacturing industries combined based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 89 manufacturing industries presented in table 1. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 1 (except building construction), and seasonal hotels.

TABLE 4.—*Comparison of Employment and Pay Rolls in Identical Establishments in January and February 1938, by Geographic Divisions and by States*

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperative State organizations]

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll February 1938	Percentage change from January 1938	Amount of pay roll (1 week) February 1938	Percentage change from January 1938	Number of establishments	Number on pay roll February 1938	Percentage change from January 1938	Amount of pay roll (1 week) February 1938	Percentage change from January 1938
				Dollars					*Dollars*	
New England	**13,744**	**796,191**	**−1.0**	**17,588,122**	**+0.4**	**3,605**	**540,794**	**+2.5**	**11,254,863**	**+2.9**
Maine	791	50,954	+2.8	1,010,354	+2.3	291	41,031	+4.0	777,749	+3.9
New Hampshire	606	34,814	+1.5	696,360	+9.2	202	28,126	+2.9	540,729	+13.5
Vermont	436	14,319	+2.1	299,561	+4.8	146	9,012	+4.8	181,306	+9.5
Massachusetts	[1] *8,253*	*434,884*	*−1.9*	*9,955,006*	−.7	*1,802*	*251,269*	+.4	*5,365,273*	*+2.6*
Rhode Island	1,225	79,367	+1.4	1,676,063	+1.7	418	61,591	+2.2	1,231,185	+3.3
Connecticut	2,433	181,853	−1.7	3,950,778	+.2	746	149,765	−1.5	3,158,621	+1.1
Middle Atlantic	**31,223**	**1,973,900**	**−.4**	**50,076,783**	**+.9**	**5,436**	**1,120,291**	**+.1**	**27,006,237**	**+2.5**
New York	20,124	881,284	+.1	24,280,968	+.5	[2] *2,293*	*407,957*	+.8	*10,754,769*	*+2.4*
New Jersey	4,155	318,787	+.7	8,030,867	+.5	[3] *829*	*235,422*	+.6	*5,835,957*	*+1.0*
Pennsylvania	6,944	773,829	−1.4	17,764,948	+1.7	*2,314*	*476,912*	[4] +.3	*10,415,511*	[4] *+4.1*
East North Central	**23,611**	**1,935,248**	**−1.7**	**46,891,420**	**−.4**	**8,491**	**1,461,204**	**−1.2**	**34,773,802**	+([5])
Ohio	7,046	520,001	−1.3	11,932,589	−.3	2,569	386,831	−.7	8,847,083	+.2
Indiana	*2,534*	*225,356*	*−1.2*	*4,870,259*	+.6	*972*	*178,036*	*−1.4*	*3,784,873*	+.8
Illinois	[6] *6,310*	*572,157*	*−1.4*	*14,564,610*	*−1.5*	*2,427*	*389,935*	*−1.1*	*9,682,111*	*−1.1*
Michigan	3,741	395,043	−3.6	10,076,715	−.2	*1,007*	*349,514*	*−2.1*	*8,623,913*	+.1
Wisconsin	[7] *3,980*	*222,691*	−.8	*5,447,247*	*+1.2*	[8] *1,516*	*156,888*	[4] −.2	*3,835,822*	[4] *+1.9*
West North Central	**11,124**	**388,538**	**−1.4**	**9,166,836**	**−1.1**	**2,445**	**198,880**	**−1.0**	**4,733,097**	**−.3**
Minnesota	2,071	78,201	−1.7	1,985,395	−1.8	432	37,806	−1.5	970,373	−1.8
Iowa	1,679	58,369	−4.6	1,338,651	−5.2	421	33,649	−6.8	801,778	−7.3
Missouri	2,827	157,640	+.7	3,613,672	+1.9	870	89,791	+2.4	1,996,893	+6.1
North Dakota	523	4,413	−4.6	106,531	−3.7	58	632	−.8	17,719	−3.5
South Dakota	445	7,289	−2.1	189,629	−2.1	38	2,117	+.5	52,876	−6.4
Nebraska	1,421	28,129	−2.0	628,964	−1.9	161	8,849	−4.1	210,740	−8.3
Kansas	[9] *2,158*	*54,497*	[10] *−.1*	*1,308,994*	[4] *−1.1*	*465*	*26,036*	*−3.0*	*682,718*	*−3.6*

See footnotes at end of table.

TABLE 4.—*Comparison of Employment and Pay Rolls in Identical Establishments in January and February 1938, by Geographic Divisions and by States*—Continued

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll February 1938	Percentage change from January 1938	Amount of pay roll (1 week) February 1938	Percentage change from January 1938	Number of establishments	Number on pay roll February 1938	Percentage change from January 1938	Amount of pay roll (1 week) February 1938	Percentage change from January 1938
				Dollars					*Dollars*	
South Atlantic	**10,576**	**824,020**	**+.9**	**15,237,337**	**+3.6**	**2,835**	**546,056**	**+1.5**	**9,144,841**	**+4.6**
Delaware	210	13,681	−2.8	321,916	−4.5	*85*	*9,988*	*−4.0*	*227,934*	*−6.4*
Maryland	*1,578*	*126,751*	*+1.1*	*2,880,626*	*+2.4*	*604*	*86,451*	[4]*+2.8*	*1,901,083*	[4]*+5.4*
District of Columbia	1,075	36,919	+.5	965,975	+.7	38	3,195	+.4	105,704	−.1
Virginia	2,055	110,275	+.4	2,061,227	+3.1	451	76,190	+.7	1,387,832	+2.9
West Virginia	1,233	144,430	+2.1	3,200,251	+7.7	250	51,426	+5.2	1,125,569	+11.8
North Carolina	1,357	157,591	−.5	2,317,658	+3.8	617	144,640	−[5]	2,090,096	+4.4
South Carolina	601	75,707	+[5]	1,020,475	+1.9	212	69,183	+.4	896,050	+2.2
Georgia	1,435	107,580	−.2	1,581,272	+.6	380	83,549	−[5]	1,075,668	+1.0
Florida	1,032	51,086	+7.3	887,937	+8.3	198	21,434	+14.4	334,905	+15.8
East South Central	**4,070**	**270,965**	**−.8**	**4,721,328**	**+2.0**	**1,022**	**164,593**	**−.2**	**2,737,006**	**+2.4**
Kentucky	1,349	80,961	−.6	1,540,667	−1.1	302	33,040	−.2	639,661	−3.1
Tennessee	1,266	93,325	−1.7	1,599,687	+3.2	371	66,314	−1.3	1,099,112	+4.9
Alabama	902	77,644	−.7	1,282,482	+3.1	252	52,604	+.1	815,389	+1.7
Mississippi	553	19,035	+3.2	298,492	+7.4	97	12,635	+4.4	182,844	+11.5
West South Central	**5,994**	**228,174**	**−.7**	**5,182,703**	**+.9**	**1,351**	**109,485**	**−.3**	**2,366,823**	**−2.4**
Arkansas	[11] *865*	*28,908*	*+.5*	*498,771*	*+.2*	*271*	*17,615*	*+4.1*	*278,525*	*+5.3*
Louisiana	991	50,154	+.2	999,826	+1.1	228	28,123	+.5	525,725	+1.5
Oklahoma	1,342	41,468	−2.4	1,026,712	−1.4	148	11,635	−2.2	276,410	−3.5
Texas	[12] *2,796*	*107,644*	*−.9*	*2,657,394*	*+2.0*	*704*	*52,112*	*−.4*	*1,286,163*	*+3.5*
Mountain	**4,023**	**116,368**	**−3.9**	**2,948,724**	**−3.2**	**568**	**31,084**	**−2.1**	**792,422**	**+.3**
Montana	630	16,012	−8.6	465,900	−8.9	85	4,063	−2.4	109,940	+.2
Idaho	425	9,117	+1.0	222,243	−2.9	50	2,060	+9.2	48,206	+16.5
Wyoming	310	8,604	−2.5	228,980	+.6	41	1,634	+.6	54,018	+3.5
Colorado	1,169	38,549	−4.0	943,190	−2.6	184	12,255	−6.7	311,969	−3.2
New Mexico	296	6,818	−.9	143,584	+.9	35	1,021	+5.8	18,705	+10.6
Arizona	447	14,986	−2.2	386,676	−4.6	38	2,997	+2.9	72,378	+.2
Utah	569	19,401	−5.1	474,189	−1.8	118	6,350	−.2	156,408	+.8
Nevada	177	2,881	−.2	83,962	+5.7	17	704	−1.4	20,798	+3.8
Pacific	**9,692**	**401,282**	**−.8**	**11,021,278**	**−.4**	**2,492**	**203,290**	**−.8**	**5,348,233**	**+1.9**
Washington	2,859	82,784	+.5	2,131,498	+1.2	552	43,113	+2.1	1,056,360	+4.0
Oregon	1,336	43,302	−2.2	1,098,352	−.3	311	23,612	−1.2	562,672	+2.4
California	[13] *5,497*	*275,196*	*−1.0*	*7,791,428*	*−.9*	*1,629*	*136,565*	*−1.6*	*3,729,201*	*+1.2*

[1] Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.
[2] Includes laundering and cleaning, and water, light and power.
[3] Includes laundries.
[4] Weighted percentage change.
[5] Less than 1/10 of 1 percent.
[6] Includes automobile, and miscellaneous services, restaurants, and building and contracting.
[7] Includes construction, but not public works.
[8] Does not include logging.
[9] Includes financial institutions, miscellaneous services, and restaurants.
[10] Weighted percentage change including hired farm labor.
[11] Includes automobile dealers and garages, and sand, gravel and building stone.
[12] Includes business and personal service.
[13] Includes banks, insurance, and office employment.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in January and February 1938 is made in table 5 for 13 metropolitan areas which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over are not included as data concerning them are tabulated separately and are available on request.

Footnotes in the table indicate which cities are excluded. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 3, with the exception of building construction, and include also miscellaneous industries.

TABLE 5.—*Comparison of Employment and Pay Rolls in Identical Establishments in January–February 1938, by Principal Metropolitan Areas*

Metropolitan area	Number of establishments	Number on pay roll February	Percentage change from January	Amount of pay roll (1 week) February	Percentage change from January
New York [1]	14,254	586,305	+0.7	$15,765,330	+1.9
Chicago [2]	4,307	435,432	−1.8	11,655,965	−1.8
Philadelphia [3]	1,881	190,628	+.6	4,955,200	+1.9
Detroit, Mich	1,615	238,679	−5.6	6,580,003	−1.7
Los Angeles [4]	2,881	146,467	+.3	3,999,404	−.9
Cleveland, Ohio	1,659	116,396	−1.5	2,748,224	−1.6
St. Louis, Mo	1,493	122,925	+1.9	2,903,126	+3.0
Baltimore, Md	1,145	96,129	−.4	2,212,754	+2.0
Boston [5]	1,516	99,722	−.1	2,691,109	+.1
Pittsburgh, Pa	1,082	173,467	−2.5	3,999,422	+2.2
San Francisco [6]	1,628	80,320	−.7	2,351,201	+.4
Buffalo, N. Y	805	52,468	−2.9	1,328,659	−5.3
Milwaukee, Wis	1,136	97,531	−1.8	2,546,628	−1.8

[1] Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J.; nor Yonkers, N. Y.
[2] Does not include Gary, Ind.
[3] Does not include Camden, N. J.
[4] Does not include Long Beach, Calif.
[5] Figures relate to city of Boston only.
[6] Does not include Oakland, Calif.

UNEMPLOYMENT IN FOREIGN COUNTRIES, WINTER OF 1937–38

GROWING concern was felt over the level of unemployment in foreign countries in the winter of 1937–38. Although in many countries the totals were not so high as in the same months of the previous year the increases, from the lowest points since the depression reached in the summer of 1937, were considerable. This trend, in combination with the failure of unemployment to decline materially with the resumption of early spring operations, makes the unemployment situation one of uncertainty. Statistics covering trade-union members, unemployed registered with public exchanges, and compulsorily insured workers are drawn upon in the accompanying table dealing with unemployment.

In Australia statistics of trade-union unemployment at the end of 1937 showed up more favorably than a year earlier. For December 1937 the unemployed totaled 37,558, or 8.2 percent of the organized workers, as compared with 46,863 persons and 10.7 percent in December 1936. The year-end figures were also lower than in any other recorded period in 1937. Canada reported a decline in the percentage of trade-union unemployment between January 1937 and 1938 from 14.5 to 12.4 percent, but in August 1937 the percentage was 7.6.

The series for several other countries in recent months showed an improvement over the preceding year; this was true in Czechoslovakia, Denmark, and the Netherlands. For France, the number of persons in receipt of unemployment benefit was higher in the first quarter of 1938 than in 1937. Registration in Norway and Poland was also somewhat higher in 1938.

After rising to over a million in January 1938 the number of unemployed in Germany decreased to 508,000 in March, this decline being the greatest for March since 1934. Reports show a continued shortage of labor in certain industries and occupations.

In Great Britain registration reached its winter peak in January when the total was 1,827,607. In the 2 months following there were successive declines to 1,810,421 and 1,748,981.

The table following gives statistics of unemployment in foreign countries as officially reported, by years from 1932 to 1937, and by months beginning with February 1937 and including the latest month for which figures are available. In practically all cases the average unemployment shown was lower for 1937 than for 1936.

Beyond comparisons of the figures in a single series for different periods, it is not possible to use the official unemployment statistics to measure volume of unemployment in a single country or to compare conditions in one country with those in another, owing to the fact that the coverage is not always complete. For example, only insured persons may be reported in some instances, or certain classes, such as agricultural labor, may be excluded.

Statement of Unemployment in Foreign Countries

Year and date (end of month)	Australia		Austria	Belgium			
	Trade-unionists unemployed		Compulsory insurance, number of unemployed in receipt of benefit	Unemployment-insurance societies			
				Wholly unemployed		Partially unemployed	
	Number	Percent		Number	Percent	Number	Percent
1932	120,454	29.4	309,969	161,468	19.0	175,259	20.7
1933	104,035	25.1	328,844	168,033	17.0	170,023	17.2
1934	86,865	20.5	287,528	182,855	19.0	166,229	17.2
1935	71,823	15.6	261,768	165,469	17.9	118,754	12.8
1936	53,992	12.2	259,185	122,256	13.4	91,451	10.0
1937	41,823	9.3	231,313	104,785	11.5	89,281	9.8
1937							
February			309,178	124,669	13.7	82,125	9.0
March	44,004	9.9	277,126	113,296	12.4	79,711	8.7
April			239,280	97,979	10.8	66,163	7.3
May			215,176	95,888	10.6	75,673	8.4
June	43,584	9.7	196,067	86,344	9.5	78,052	8.6
July			187,360	84,348	9.3	78,831	8.7
August			178,081	88,825	9.8	89,606	9.9
September	42,145	9.3	176,308	90,574	9.9	84,282	9.3
October			188,262	91,993	10.1	81,504	8.9
November			224,166	115,564	12.7	110,176	12.1
December	37,558	8.2	268,784	136,298	14.9	147,510	16.1
1938							
January			302,263	146,678	16.0	178,668	19.4
February			[1] 300,294				
March							

[1] Preliminary figure.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Canada	Czechoslovakia			Danzig, Free City of	Denmark	
	Percent of trade-unionists unemployed	Number of unemployed on live register	Trade-union insurance funds—unemployed in receipt of benefit		Number of unemployed registered	Trade-union unemployment funds—unemployed	
			Number	Percent		Number	Percent
1932	22.0	554,059	184,555	13.5	33,244	99,508	31.7
1933	22.3	738,267	247,613	16.9	31,408	97,417	28.8
1934	18.2	676,994	245,953	17.4	20,326	81,756	22.2
1935	15.4	686,269	235,623	15.9	17,983	76,195	19.8
1936	13.3	622,687	208,539	13.1	13,553	78,669	19.3
1937	10.8	408,949	151,167	8.8	8,009	[1] 95,103	21.9
1937							
February	13.7	677,947	221,464	13.2	16,724	133,795	31.4
March	12.9	627,258	210,244	12.4	14,909	122,687	28.6
April	11.1	503,632	176,348	10.3	8,776	74,793	17.5
May	9.5	385,061	137,677	8.0	6,526	63,310	14.8
June	10.4	303,535	113,838	6.6	4,617	60,199	13.9
July	8.9	248,127	110,861	6.4	3,327	66,006	15.2
August	7.6	233,318	108,063	6.2	2,984	65,853	15.1
September	7.7	230,692	106,496	6.1	2,910	72,387	16.5
October	8.9	237,737	107,782	6.1	3,800	84,684	19.2
November	11.2	333,455	132,364	7.5	5,028	103,878	23.5
December	13.0	459,142	177,972	10.0	9,714	153,384	34.6
1938							
January	12.4	519,002	220,050	12.4	10,223	133,083	29.6
February	----------	511,288	----------	----------	8,580	127,794	28.3
March	----------	[1] 435,126	----------	----------	----------	103,288	22.7

Year and date (end of month)	Estonia	Finland	France	Germany	Great Britain
	Number unemployed remaining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Number of persons registered with employment exchanges
1932	7,121	17,581	273,412	5,579,858	2,757,000
1933	8,210	17,139	276,033	4,733,014	2,520,616
1934	2,970	10,011	345,033	2,718,309	2,159,231
1935	1,779	7,163	426,931	[2] 2,151,039	2,036,422
1936	1,276	4,796	432,120	[3] 1,592,630	1,754,975
1937	1,158	3,763	350,458	[3] 912,312	----------
1937					
February	2,064	5,383	410,219	1,610,947	1,627,845
March	1,801	4,482	386,254	1,245,338	1,601,201
April	1,191	3,554	368,381	960,764	1,454,443
May	638	3,126	345,503	776,321	1,451,330
June	486	2,076	321,725	648,421	1,356,598
July	403	2,089	313,553	562,892	1,379,459
August	470	2,794	311,315	509,257	1,358,621
September	473	3,450	305,341	469,053	[3] 1,339,204
October	788	3,705	319,223	501,847	1,390,249
November	1,473	3,924	332,850	572,621	1,499,203
December	1,726	3,770	365,452	994,784	1,665,407
1938					
January	2,255	4,579	403,813	1,051,745	1,827,607
February	1,798	4,544	412,386	946,431	1,810,421
March	1,805	----------	401,056	508,000	1,748,981

[1] Preliminary figure. [2] Includes the Saar. [3] New series.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Great Britain and Northern Ireland				Hungary		
	Compulsory insurance				Employment exchanges, applications for work	Trade-unionists unemployed	
	Wholly unemployed		Temporary stoppages				
	Number	Percent	Number	Percent		Christian (Budapest)	Social Democratic
1932	2,272,590	17.6	573,805	4.5	66,235	1,026	29,772
1933	2,110,090	16.4	456,678	3.5	60,595	1,085	26,716
1934	1,801,913	13.9	368,906	2.9	52,157	996	22,291
1935	1,714,844	13.2	312,958	2.3	52,048	967	18,315
1936	1,497,587	11.3	251,379	1.9	52,114	800	15,637
1937	1,277,928	9.4	204,020	1.5	48,359	945	14,279
1937							
February	1,460,026	10.9	164,739	1.3	56,192	1,012	16,148
March	1,406,530	10.5	169,740	1.3	56,782	1,011	15,878
April	1,305,280	9.8	130,788	1.0	53,865	943	14,984
May	1,245,589	9.3	210,401	1.6	50,273	936	13,637
June	1,166,881	8.7	203,329	1.6	45,740	729	13,513
July	1,136,287	8.5	249,345	1.9	43,915	815	13,169
August	1,148,487	8.6	208,941	1.6	45,904	843	12,584
September	1,138,731	8.5	194,997	1.5	44,946	864	12,895
October	1,215,000	8.9	179,856	1.3	45,187	896	12,896
November	1,284,386	9.4	222,204	1.6	36,968	1,116	13,840
December	1,338,850	9.8	326,026	2.4	46,132	1,211	16,163
1938							
January	1,466,354	10.7	351,483	2.6	49,832	1,270	19,108
February	1,466,887	10.7	340,630	2.5	----------	----------	----------
March	1,425,596	10.4	338,483	2.5	----------	----------	----------

Year and date (end of month)	Irish Free State	Italy	Japan		Latvia	Netherlands	
	Compulsory insurance—number unemployed	Number of unemployed registered—wholly unemployed	Official estimates, unemployed		Number unemployed remaining on live register	Unemployment insurance societies—unemployed	
			Number	Percent		Number	Percent
1932	62,817	1,006,442	485,681	6.8	14,587	153,500	29.5
1933	72,255	1,018,955	408,710	5.6	8,156	163,000	31.0
1934	103,671	963,677	372,941	5.0	4,972	160,400	32.1
1935	[4] 119,498	----------	356,103	4.6	4,825	173,673	36.3
1936	99,834	----------	----------	----------	3,851	168,668	36.2
1937	82,425	----------	----------	----------	3,014	[1] 137,393	29.1
1937							
February	91,680	----------	328,528	4.1	6,178	161,107	34.5
March	93,426	----------	315,845	4.0	6,110	149,115	31.9
April	92,363	----------	307,958	3.9	3,290	133,523	28.5
May	88,480	----------	300,343	3.8	2,127	124,711	26.5
June	64,011	----------	299,341	3.7	1,446	119,325	25.3
July	63,288	----------	284,551	3.6	1,146	122,982	26.0
August	65,670	----------	277,258	3.5	1,093	124,610	26.3
September	68,928	----------	275,938	3.5	1,075	124,012	26.1
October	68,809	----------	281,215	3.4	1,077	126,621	26.6
November	94,414	----------	280,000	3.4	2,304	138,118	28.9
December	97,855	----------	----------	----------	3,968	155,959	32.4
1938							
January	105,449	----------	----------	----------	4,125	[1] 155,986	32.9
February	104,829	----------	----------	----------	[1] 4,071	[1] 148,733	31.2
March	----------	----------	----------	----------	----------	----------	----------

[1] Preliminary figure.

[4] Incomplete figures.

Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	New Zealand	Norway			Poland	Rumania
	Number unemployed registered by employment exchanges [1]	Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register
		Number	Percent			
1932	51,549	14,790	30.8	32,705	255,582	38,899
1933	46,971	16,588	33.4	35,591	249,660	29,060
1934	39,235	15,963	30.7	35,121	342,166	16,871
1935	38,234	14,783	25.3	36,103	381,935	13,852
1936	36,890	13,267	18.8	32,643	367,327	13,549
1937	----------	----------	----------	28,520	375,088	----------
1937						
February	28,941	18,163	23.1	34,440	545,651	19,653
March	27,907	18,457	23.2	32,951	525,041	17,392
April	27,953	17,561	21.8	31,824	443,140	12,609
May	28,302	14,813	18.1	26,298	334,527	10,784
June	29,326	13,020	15.6	22,028	294,334	6,396
July	30,443	12,772	15.2	18,572	278,361	5,822
August	27,323	13,221	15.6	20,045	261,386	5,878
September	25,053	14,503	17.0	25,431	252,719	6,083
October	----------	16,286	19.1	29,063	263,615	6,343
November	----------	18,827	22.0	32,239	329,474	----------
December	----------	22,687	26.6	33,906	463,175	----------
1938						
January	----------	----------	----------	33,046	546,947	----------
February	----------	----------	----------	34,104	547,983	----------
March	----------	----------	----------	----------	493,000	----------

Year and date (end of month)	Sweden	Switzerland				Yugoslavia
	Trade-unionists unemployed	Unemployment funds				Number of unemployed registered
		Wholly unemployed		Partially unemployed		
	Number	Percent	Number	Percent	Number	Percent	
1932	89,922	22.8	----------	9.1	----------	12.2	14,761
1933	97,316	23.7	----------	10.8	----------	8.5	15,997
1934	80,216	18.9	----------	9.8	----------	6.1	15,647
1935	81,385	16.1	----------	11.8	----------	5.9	16,752
1936	71,552	13.6	----------	13.2	----------	5.3	19,436
1937	67,351	11.6	----------	10.0	----------	2.5	21,650
1937							
February	80,637	14.5	84,100	16.0	16,000	3.0	39,510
March	83,024	14.9	66,985	12.7	14,488	2.7	35,324
April	68,156	12.1	51,300	9.7	12,100	2.2	24,765
May	51,903	9.2	37,800	7.2	10,200	1.9	16,936
June	49,109	8.6	34,082	6.4	10,217	1.9	11,258
July	42,451	7.4	34,300	6.6	10,300	1.9	11,543
August	40,953	7.1	34,800	6.7	10,900	2.0	10,845
September	43,474	7.5	36,404	6.8	11,194	2.1	12,250
October	52,879	9.0	40,000	7.6	13,000	2.4	13,719
November	69,533	11.7	50,000	9.5	16,200	3.0	18,494
December	109,621	18.5	71,613	13.4	18,877	3.5	29,988
1938							
January	92,909	15.4	77,900	14.0	20,900	4.0	44,234
February	89,614	14.5	----------	----------	----------	----------	----------
March	----------	----------	----------	----------	----------	----------	----------

[1] New series from 1933 on.

Building Operations

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, MARCH 1938 [1]

THE value of permits issued for all classes of building construction in March increased 19.1 percent compared with February. Permit valuations for new residential buildings showed a gain of 71.8 percent, which was considerably larger than the usual seasonal increase. The value of additions, alterations, and repairs increased 11.6 percent; and new nonresidential building declined 15.0 percent.

Comparing March permit valuations with March a year ago, new residential building decreased 37.0 percent; new nonresidential, 31.6 percent; additions, alterations, and repairs, 14.9 percent; and total construction dropped 31.3 percent.

Comparison of March 1938 With February 1938

A summary of building construction in 2,032 identical cities in February and March 1938 is given in table 1.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,032 Identical Cities, February and March 1938*

Class of construction	Number of buildings			Permit valuation		
	March 1938	February 1938	Percentage change	March 1938	February 1938	Percentage change
All construction	56,100	34,640	+62.0	$121,011,809	$101,646,792	+19.1
New residential	12,172	7,222	+68.5	55,761,221	32,454,190	+71.8
New nonresidential	9,514	5,607	+69.7	38,238,097	44,983,502	−15.0
Additions, alterations, and repairs	34,414	21,811	+57.8	27,012,491	24,209,100	+11.6

[1] More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, March 1938," copies of which will be furnished upon request.

Comparison of March 1938 With March 1937

Table 2 presents a summary of the number of buildings and value of permits issued in 1,589 identical cities in March 1938, compared with the corresponding month of 1937.

TABLE 2.—*Summary of Building Construction for Which Permits Were Issued in 1,589 Identical Cities, March 1937 and March 1938*

Class of construction	Number of buildings			Permit valuation		
	March 1938	March 1937	Percentage change	March 1938	March 1937	Percentage change
All construction	55,093	59,639	−7.6	$118,842,328	$172,895,958	−31.3
New residential	11,801	14,562	−19.0	54,545,917	86,556,438	−37.0
New nonresidential	9,270	10,109	−8.3	37,507,141	54,873,083	−31.6
Additions, alterations, and repairs	34,022	34,968	−2.7	26,789,270	31,466,437	−14.9

A summary of permit valuations of housekeeping dwellings and the number of families provided for in new dwellings in 2,032 identical cities, having a population of 1,000 and over, is shown in table 3 for March compared with February 1938.

TABLE 3.—*Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,032 Identical Cities, February and March 1938*

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for in new dwellings		
	March 1938	February 1938	Percentage change	March 1938	February 1938	Percentage change
All types	$55,204,068	$32,428,690	+70.2	14,850	9,425	+57.6
1-family	44,497,036	24,988,996	+78.1	11,266	6,595	+70.8
2-family [1]	3,079,154	1,792,107	+71.8	1,128	697	+61.8
Multifamily [2]	7,627,878	5,647,587	+35.1	2,456	2,133	+15.1

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

TABLE 4.—*Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 1,589 Identical Cities, March 1937 and March 1938*

Type of dwelling	Permit valuation of housekeeping dwellings			Number of families provided for		
	March 1938	March 1937	Percentage change	March 1938	March 1937	Percentage change
All types	$54,009,064	$85,559,858	−36.9	14,455	21,441	−32.6
1-family	43,471,132	60,496,407	−28.1	10,924	13,450	−18.8
2-family [1]	3,013,404	3,360,035	−10.3	1,097	1,184	−7.3
Multifamily [2]	7,524,528	21,703,416	−65.3	2,434	6,807	−64.2

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Table 4 shows a comparison of the value of permits issued for housekeeping dwellings and the number of families provided for in new dwellings in 1,589 identical cities, with a population of 2,500 and over, in March 1938, with the corresponding month of the preceding year.

Analysis by Size of City, March 1938

Table 5 shows the value of permits issued for building construction in March 1938 compared with February 1938 and March 1937, by size of city and by class of construction.

TABLE 5.—*Permit Valuation of Building Construction, by Size of City, March 1938*

Size of city	Number of cities	Total construction			New residential buildings		
		Permit valuation, March 1938	Percentage change from—		Permit valuation, March 1938	Percentage change from—	
			February 1938	March 1937		February 1938	March 1937
Total, all reporting cities	2,032	$121,011,809	[1] +19.1	[2] −31.3	$55,761,221	[1] +71.8	[2] −37.0
500,000 and over	14	37,934,069	+1.8	−48.2	16,827,450	+97.2	−52.2
100,000 and under 500,000	79	28,939,281	+25.7	−17.3	12,065,884	+38.5	−19.4
50,000 and under 100,000	96	12,216,436	+30.2	−10.3	4,876,194	+66.5	−27.8
25,000 and under 50,000	156	10,389,031	+21.4	−29.5	4,728,065	+54.7	−29.6
10,000 and under 25,000	419	16,386,469	+20.7	−22.8	8,149,726	+86.1	−33.8
5,000 and under 10,000	377	7,687,635	+60.1	−15.4	4,367,078	+74.4	−31.9
2,500 and under 5,000	448	5,289,407	+48.1	−10.8	3,531,520	+101.1	−15.8
1,000 and under 2,500	443	2,169,481	+45.4	----------	1,215,304	+107.3	----------

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	Permit valuation, March 1938	Percentage change from—		Permit valuation, March 1938	Percentage change from—		
		February 1938	March 1937		February 1938	March 1937	
Total, all reporting cities	$38,238,097	[1] −15.0	[2] −31.6	$27,012,491	[1] +11.6	[2] −14.9	59,709,568
500,000 and over	12,176,598	−35.6	−51.5	8,930,021	−8.9	−31.3	21,449,853
100,000 and under 500,000	9,459,437	+20.9	−21.2	7,413,960	+14.4	−7.7	15,015,922
50,000 and under 100,000	4,271,197	+11.0	+7.1	3,069,045	+17.8	+6.7	6,362,158
25,000 and under 50,000	3,282,772	−9.2	−36.5	2,378,194	+26.4	−16.6	5,564,278
10,000 and under 25,000	5,136,226	−27.9	−14.0	3,100,517	+49.9	+5.4	6,373,998
5,000 and under 10,000	1,979,093	+27.3	+31.7	1,341,464	+80.7	+14.4	2,643,430
2,500 and under 5,000	1,201,818	−12.7	+5.0	556,069	+26.4	−6.3	1,597,982
1,000 and under 2,500	730,956	+1.4	----------	223,221	+21.2	----------	701,947

[1] Based on 2,032 reporting cities.
[2] Based on 1,589 cities.

The permit valuation of housekeeping dwellings in the 2,032 identical cities reporting for February and March 1938, together with the number of family-dwelling units provided in new dwellings, by size of city, is given in table 6.

TABLE 6.—*Permit Valuation of Housekeeping Dwellings and Number of Families Provided for in 2,032 Identical Cities, by Size of City, February and March 1938*

Size of city	Permit valuation of housekeeping dwellings			Number of families provided for in—							
				All types		1-family dwellings		2-family dwellings[1]		Multifamily dwellings[2]	
	Mar. 1938	Feb. 1938	Percentage change	Mar. 1938	Feb. 1938	Mar. 1938	Feb. 1938	Mar. 1938	Feb. 1938	Mar. 1938	Feb. 1938
Total, all reporting cities	$55,204,068	$32,428,690	+70.2	14,850	9,425	11,266	6,595	1,128	697	2,456	2,133
500,000 and over	16,811,450	8,532,587	+97.0	4,127	2,303	2,668	1,243	272	140	1,187	920
100,000 and under 500,000	12,065,884	8,709,305	+38.5	3,386	2,524	2,439	1,562	281	218	666	744
50,000, and under 100,000	4,713,011	2,929,466	+60.9	1,331	877	1,076	653	155	105	100	119
25,000 and under 50,000	4,728,065	3,031,995	+55.9	1,336	928	1,164	770	96	81	76	77
10,000 and under 25,000	8,046,726	4,379,739	+83.7	2,231	1,292	1,913	1,057	157	68	161	167
5,000 and under 10,000	4,121,408	2,503,820	+64.6	1,123	703	963	634	76	33	84	36
2,500 and under 5,000	3,522,520	1,756,103	+100.6	921	593	701	495	60	33	160	65
1,000 and under 2,500	1,195,004	585,675	+104.0	395	205	342	181	31	19	22	5

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Construction During First Quarter, 1937 and 1938

Cumulative totals for the first quarter of 1938 compared with the same quarter of the preceding year are shown in table 7. The data are based on reports received from cities having a population of 2,500 and over.

TABLE 7.—*Permit Valuation of Building Construction in Reporting Cities of 2,500 Population and Over, First Quarter of 1937 and of 1938, by Class of Construction*

Class of construction	Permit valuation of building construction, first quarter of—		
	1938	1937	Percentage change
All construction	$392,852,428	$400,917,884	−2.0
New residential	185,302,214	193,194,669	−4.1
New nonresidential	132,932,998	123,924,312	+7.3
Additions, alterations, and repairs	74,617,216	83,798,903	−11.0

Table 8 presents the permit valuation of housekeeping dwellings and number of family dwelling units provided in cities, with a population of 2,500 and over, for the first quarter of 1937 and 1938.

TABLE 8.—*Permit Valuation of Housekeeping Dwellings and Number of Family-Dwelling Units, First Quarter of 1937 and of 1938, by Type of Dwelling*

Type of dwelling	Permit valuation of housekeeping dwellings			Number of family-dwelling units		
	First quarter of—		Percentage change	First quarter of—		Percentage change
	1938	1937		1938	1937	
All types	$184,319,521	$191,239,654	−3.6	53,679	48,700	+10.2
1-family	93,304,069	129,576,369	−28.0	24,387	29,006	−15.9
2-family [1]	7,648,198	7,939,917	−3.7	3,016	2,891	+4.3
Multifamily [2]	83,367,254	53,723,368	+55.2	26,276	16,803	+56.4

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

The information on building permits issued February and March 1938 is based on reports received by the Bureau of Labor Statistics from 2,032 identical cities having a population of 1,000 and over. The data for March 1937 and 1938 are based on reports from 1,589 identical cities with a population of 2,500 and over.

The information is collected by the Bureau of Labor Statistics direct from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. In addition to permits issued for private building construction, the statistics include the value of contracts for Federal and State buildings in the cities covered. Information concerning public building is collected by the Bureau from various Federal and State agencies having the power to award contracts for building construction. These data are then added to the data concerning private construction received from local building officials. In March 1938 the value of Federal and State buildings for which contracts were awarded in cities included in the report amounted to $6,431,000; in February 1938, to $8,843,000; and in March 1937, to $6,229,000.

Construction From Public Funds

The value of contracts awarded and force-account work started during March 1938, February 1938, and March 1937 on construction projects financed from various Federal funds is shown in table 9.

TABLE 9.—*Value of Contracts Awarded and Force-Account Work Started on Projects Financed From Federal Funds, March 1938, February 1938, and March 1937* [1]

Federal agency	Value of contracts awarded and force-account work started—		
	March 1938	February 1938 [2]	March 1937 [1]
Total	$67,535,363	$112,396,968	$72,331,197
Public Works Administration:			
Federal	761,584	592,139	606,558
Non-Federal:			
N. I. R. A.	2,046,996	832,467	3,754,806
E. R. A. A.	23,390,975	30,811,962	21,918,077
Federal projects under The Works Program	6,813,225	5,866,837	8,021,490
Regular Federal appropriations	34,522,583	74,293,563	38,030,266

[1] Preliminary, subject to revision.
[2] Revised.

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for March 1938, February 1938, and March 1937, is shown in table 10.

TABLE 10.—*Value of Public-Building and Highway-Construction Awards Financed Wholly From State Funds*

Type of project	Value of contracts		
	March 1938	February 1938	March 1937
Public buildings	$2,230,640	$3,022,541	$469,155
Highway construction	4,142,219	2,059,613	1,870,835

Retail Prices

SUMMARY

Food, Electricity, and Gas

FOOD costs for March reversed the downward movement of the preceding 5 months with a slight advance of 0.2 percent in the all-foods index since February. Changes in prices of meats have been the predominating influence in the movement of the food-cost index during recent months.

Price changes were recorded for nine cities for electricity and four cities for gas. Rates for electricity continued the general downward trend, while gas rates showed both increases and decreases.

FOOD PRICES IN MARCH 1938

THE retail cost of all foods was 0.2 percent higher in March than in February due to an increase in the cost for meats. This slight increase in food costs reverses the downward movement of the preceding 5 months, which had been the result, primarily, of a continuous decline for meats. In March, costs for all commodity groups other than meats were lower than in February or showed no change.

The all-foods index for March 15 was 78.6 percent of the 1923–25 average. This is 8.0 percent lower than for the corresponding period of a year ago when the index was 85.4. The major factor in this decrease was a drop of 29.3 percent in the cost of fresh fruits and vegetables. Lower costs were shown for all commodity groups except sugar and sweets, which stood at last year's level Current food costs are 31.4 percent higher than in March 1933. During this 5-year period, costs have advanced for all commodity groups except beverages and chocolate. The cost of each of these groups is, however, well below the March 1929 level, when the all-foods index was 101.4 percent of the 1923–25 average.

Details by Commodity Groups

The index for cereals and bakery products decreased 0.3 percent during the month. This group has shown a slow downward move-

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ment since last summer. The price of wheat flour, one of the important items in the group, has declined continuously since last July. Between February and March, the decrease for flour amounted to 0.8 percent. The average price of white bread remained unchanged. Price declines were reported for 10 of the 13 items in the group. The greatest relative changes were decreases of 2.9 percent for hominy grits and 1.6 percent for rice.

The advance of 2.5 percent in the cost of meats between February and March followed a steady decline which amounted to 18.7 percent between September 1937 and February 1938. The cost of the beef items, the most important subgroup, rose 1.6 percent. Pork advanced 4.6 percent, with prices of fresh pork advancing as much as 13.8 percent, the increase reported for loin roast. Prices for cured pork either decreased or showed only slight increases.

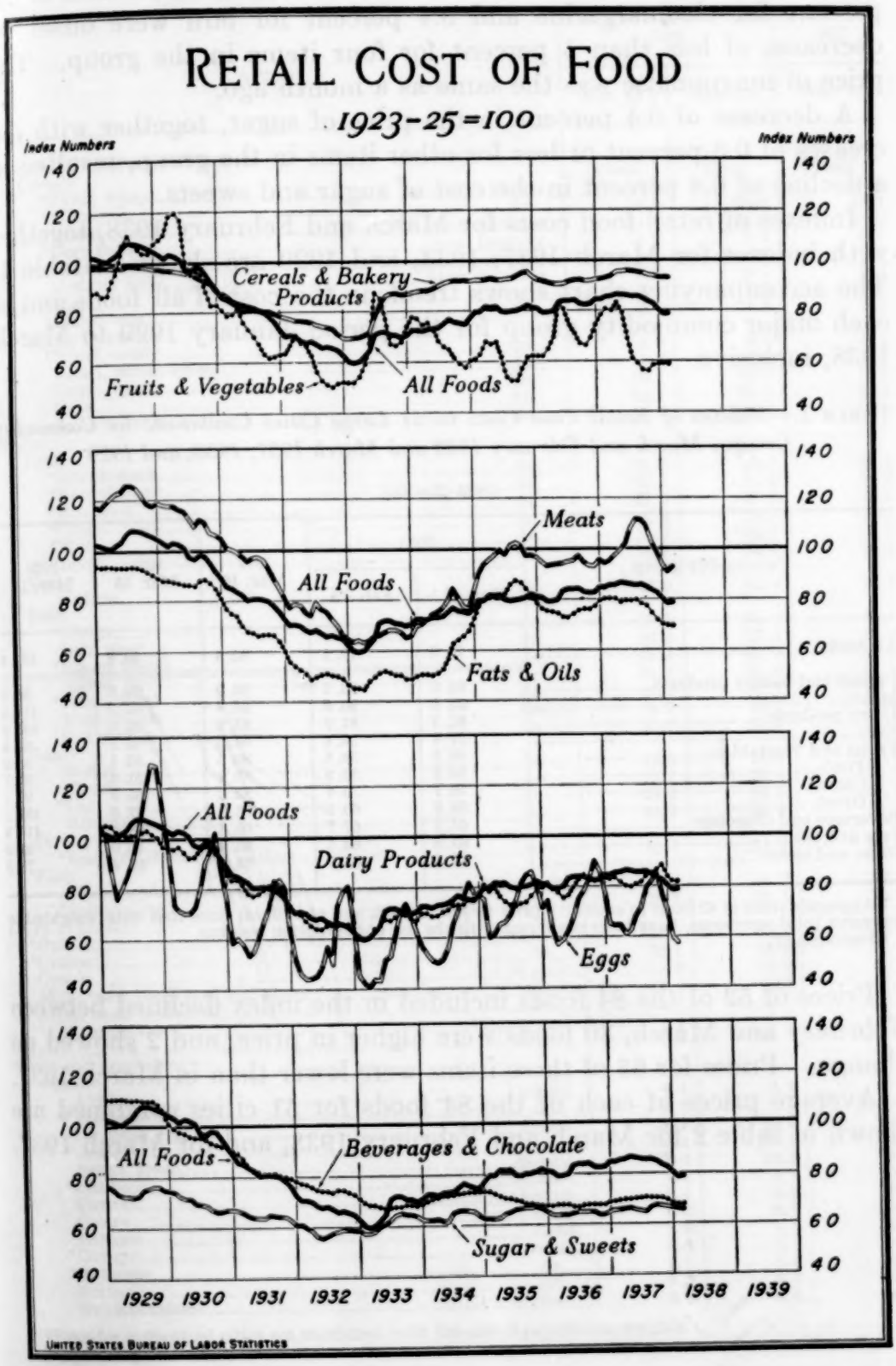
For lamb items, the average increase was 8.4 percent. The price of roasting chickens was slightly lower and canned salmon decreased 1.2 percent. The rise in meat prices was general throughout the country with 49 of the 51 cities reporting advances.

The cost of dairy products declined 0.7 percent. Butter prices fell 1.9 percent, contrary to the usual seasonal movement. Lower prices for butter were reported from 43 cities. The average price for cheese was 1.1 percent below a month ago. The slight decrease reported for fresh milk was due primarily to a reduction of 1 cent per quart in the price in Buffalo. Prices for evaporated milk and cream were also lower than a month ago.

The decline in the cost of eggs amounted to 3.5 percent for the country as a whole. Nine cities, however, including all those in the Pacific region, reported increased prices for eggs. The average price for March 1938 was 10.8 percent lower than in March 1937.

The average cost of fruits and vegetables changed relatively little over the monthly interval, with a decrease of 0.5 percent recorded for the group as a whole. Higher costs, reported from 23 cities, were offset by decreased costs in 25 cities. The decrease of 0.5 percent in the cost of the fresh items was the net result of opposite price movements. Lower prices were reported for 9 of the 13 items. Cabbage decreased 11.7 percent, contrary to its customary price movement at this season. Onions were down 8.9 percent. An increase of 3.8 percent was reported for potatoes. Other price advances ranged from 0.7 percent for carrots to 8.6 percent for lettuce. There were no significant price changes for the canned items. The cost of the dried items fell off 1.2 percent. The price of prunes decreased 1.2 percent, navy beans 1.7 percent, and black-eyed peas 2.8 percent. Price changes for other dried items were unimportant.

Beverages and chocolate costs were 0.1 percent lower than in February. The average price for coffee decreased 0.7 percent, while


RETAIL COST OF FOOD
1923-25=100
Index Numbers
Index Numbers
140
120
100
80
60
40
Cereals & Bakery Products
Fruits & Vegetables
All Foods
Meats
All Foods
Fats & Oils
All Foods
Dairy Products
Eggs
All Foods
Beverages & Chocolate
Sugar & Sweets
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939
UNITED STATES BUREAU OF LABOR STATISTICS

that for tea increased 0.8 percent. Cocoa and chocolate prices showed slight declines.

The index for fats and oils remained unchanged. Increases of 1.2 percent for oleomargarine and 0.4 percent for lard were offset by decreases of less than 1 percent for four items in the group. The price of mayonnaise was the same as a month ago.

A decrease of 0.4 percent in the price of sugar, together with decreases of 0.6 percent or less for other items in the group, resulted in a decline of 0.4 percent in the cost of sugar and sweets.

Indexes of retail food costs for March and February 1938, together with indexes for March 1937, 1933, and 1929 are shown in table 1. The accompanying chart shows trends in the cost of all foods and of each major commodity group for the period January 1929 to March 1938, inclusive.

TABLE 1.—*Indexes of Retail Food Costs in 51 Large Cities Combined,*[1] *by Commodity Groups, March and February 1938 and March 1937, 1933, and 1929*

[1923–25=100]

Commodity group	1938		1937	1933	1929
	Mar. 15 [2]	Feb. 15	Mar. 16	Mar. 15	Mar. 15
All foods	78.6	78.4	85.4	59.8	101.4
Cereals and bakery products	92.9	93.2	92.9	69.3	98.2
Meats	92.9	90.6	95.4	64.2	118.6
Dairy products	81.4	81.9	83.6	59.8	105.2
Eggs	57.4	59.4	64.3	42.7	87.4
Fruits and vegetables	58.5	58.8	80.5	52.1	86.9
Fresh	56.6	56.9	80.1	51.4	84.7
Canned	79.1	79.4	82.6	65.3	97.1
Dried	59.9	60.6	76.0	47.3	101.3
Beverages and chocolate	67.7	67.7	69.3	68.5	110.9
Fats and oils	69.5	69.5	80.3	45.0	93.8
Sugar and sweets	65.6	65.9	65.6	57.4	73.5

[1] Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.
[2] Preliminary.

Prices of 52 of the 84 foods included in the index declined between February and March, 30 foods were higher in price, and 2 showed no change. Prices for 65 of these items were lower than in March 1937.

Average prices of each of the 84 foods for 51 cities combined are shown in table 2 for March and February 1938, and for March 1937.

TABLE 2.—*Average Retail Prices of 84 Foods in 51 Large Cities Combined,[1] March and February 1938 and March 1937*

[*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article		1938		1937
		Mar. 15 [2]	Feb. 15	Mar. 16
Cereals and bakery products:				
Cereals:		*Cents*	*Cents*	*Cents*
*Flour, wheat	pound	4.2	4.3	5.0
*Macaroni	do	14.9	15.0	15.4
*Wheat cereal	28-oz. package	24.5	24.4	24.2
*Corn flakes	8-oz. package	7.5	7.5	8.1
*Corn meal	pound	4.8	4.8	5.4
Hominy grits	24-oz. package	8.8	9.1	9.7
*Rice	pound	7.9	8.0	8.5
*Rolled oats	do	7.2	7.3	7.5
Bakery products:				
*Bread, white	do	8.9	8.9	8.5
Bread, whole-wheat	do	9.8	9.8	9.5
Bread, rye	do	10.1	10.1	9.8
Cake	do	24.7	24.8	25.4
Soda crackers	do	16.4	16.4	18.1
Meats:				
Beef:				
*Sirloin steak	do	34.6	33.9	40.1
*Round steak	do	32.1	31.0	35.9
*Rib roast	do	27.9	27.5	30.6
*Chuck roast	do	21.4	[3] 21.0	23.8
*Plate	do	14.7	[3] 14.7	15.9
Liver	do	24.6	24.4	25.4
Veal:				
Cutlets	do	43.0	42.9	40.9
Pork:				
*Chops	do	31.9	28.9	33.1
Loin roast	do	26.6	23.4	27.0
*Bacon, sliced	do	37.5	37.7	39.9
Bacon, strip	do	31.6	31.6	34.3
*Ham, sliced	do	45.3	45.1	49.2
Ham, whole	do	28.2	28.2	29.9
Salt pork	do	20.8	21.1	25.1
Lamb:				
Breast	do	12.8	11.8	12.9
Chuck	do	22.2	20.4	22.3
*Leg	do	28.2	26.2	28.7
Rib chops	do	35.5	32.6	35.7
Poultry:				
*Roasting chickens	do	35.3	35.5	31.0
Fish:				
Salmon, pink	16-oz. can	14.0	14.2	12.8
*Salmon, red	do	26.8	27.1	24.7
Dairy products:				
*Butter	pound	37.0	37.7	41.8
*Cheese	do	28.1	28.4	29.3
Cream	½ pint	14.9	15.0	15.1
Milk, fresh (delivered and store) [4]	quart	12.4	12.5	12.3
*Milk, fresh (delivered)	do	12.7	12.7	12.5
*Milk, evaporated	14½-oz. can	7.4	7.5	7.6
*Eggs	dozen	29.2	30.3	33.5
Fruits and vegetables:				
Fresh:				
Apples	pound	4.4	4.4	7.0
*Bananas	do	6.3	6.4	6.5
Lemons	dozen	27.7	29.0	30.7
*Oranges	do	24.4	24.1	36.0
Beans, green	pound	13.4	14.5	19.0
*Cabbage	do	4.5	5.1	4.0
Carrots	bunch	5.4	5.4	5.4
Celery	stalk	8.2	8.3	10.1
Lettuce	head	7.8	7.2	10.7
*Onions	pound	4.6	5.1	4.5
*Potatoes	do	2.1	2.0	3.8
Spinach	do	6.3	6.9	7.1
Sweetpotatoes	do	3.9	3.9	4.9

[1] Prices for individual cities are combined with the use of population weights
[2] Preliminary.
[3] Revised.
[4] Average prices of milk delivered by dairies and sold in grocery stores weighted according to the relative proportion distributed by each method.

TABLE 2.—*Average Retail Prices of 84 Foods in 51 Large Cities Combined March and February 1938 and March 1937*—Continued

Article		1938		1937
		Mar. 15	Feb. 15	Mar. 16
Fruits and vegetables—Continued.				
Canned:		*Cents*	*Cents*	*Cents*
Peaches	No. 2½ can	19.5	19.4	18.9
Pears	do	21.7	21.7	22.4
Pineapple	do	23.2	23.2	22.6
Asparagus	No. 2 can	30.5	30.5	27.5
Beans, green	do	11.6	11.4	12.4
*Beans with pork	16-oz. can	7.5	7.6	7.8
*Corn	No. 2 can	11.9	11.8	13.1
*Peas	do	15.5	15.9	16.3
*Tomatoes	do	8.9	9.0	9.5
Tomato soup	10½-oz. can	7.5	7.5	8.2
Dried:				
Peaches	pound	15.8	15.8	17.5
*Prunes	do	9.3	9.4	10.7
*Raisins	15-oz. package	10.0	10.1	10.0
Black-eyed peas	pound	7.8	8.0	9.9
Lima beans	do	9.3	9.3	12.1
*Navy beans	do	6.4	6.5	10.7
Beverages and chocolate:				
*Coffee	do	23.6	23.8	25.2
*Tea	¼ pound	17.7	17.6	[1] 17.9
Cocoa	8-oz. can	8.8	9.1	10.5
Chocolate	8-oz. package	16.1	16.2	16.7
Fats and oils:				
*Lard	pound	13.6	13.5	17.5
Lard compound	do	13.2	13.3	16.5
*Vegetable shortening	do	19.5	19.7	21.9
Salad oil	pint	24.8	24.9	25.7
Mayonnaise	½ pint	17.5	17.5	17.0
*Oleomargarine	pound	17.6	17.4	19.9
Peanut butter	do	18.7	18.8	19.5
Sugar and sweets:				
*Sugar	do	5.5	5.5	5.7
Corn sirup	24-oz. can	14.1	14.1	14.5
Molasses	18-oz. can	14.0	14.0	14.5
Strawberry preserves	pound	22.1	22.2	21.7

[1] Converted to quarter pound for comparison with 1938.

Details by Regions and Cities

The 0.2 percent increase in the composite index between February and March resulted from higher costs in 28 cities and lower costs in 21 cities. For two cities, no change was reported. In Mobile, Scranton, and Milwaukee, where the largest advances were reported, increases for meats amounted to more than 5 percent. In Atlanta, Little Rock, and Charleston, food costs declined more than 1 percent, due chiefly to greater than average price decreases for butter and certain fresh vegetables, notably cabbage. In Kansas City, the decline of 1.3 percent resulted from a reduction of 1.2 cents per pound in the price of white bread.

Indexes of retail costs of food by cities and regions are given in table 3 for March and February 1938 and for March of earlier years.

TABLE 3.—*Indexes of the Average Retail Cost of All Foods, by Regions and Cities,*[1] *March and February 1938, March 1937, 1936, 1933, 1932, and 1929*

[1923-25=100]

Region and city	1938		1937	1936	1933	1932	1929
	Mar. 15 [2]	Feb. 15	Mar. 16	Mar. 10	Mar. 15	Mar. 15	Mar. 15
United States	**78.6**	**78.4**	**85.4**	**79.5**	**59.8**	**70.7**	**101.4**
New England	**76.3**	**76.5**	**81.9**	**78.4**	**59.8**	**70.7**	**100.7**
Boston	74.0	74.6	79.3	76.6	59.1	69.1	100.1
Bridgeport	82.3	81.4	86.6	82.7	62.2	74.8	100.3
Fall River	79.5	79.7	84.6	79.5	58.4	69.8	101.2
Manchester	79.6	79.0	86.3	80.9	59.7	69.1	100.2
New Haven	80.8	80.7	87.4	82.3	61.6	75.6	102.9
Portland, Maine	77.6	77.1	83.3	79.0	60.8	72.5	101.1
Providence	76.2	75.2	82.7	78.3	59.7	69.3	100.1
Middle Atlantic	**79.3**	**79.0**	**85.0**	**80.2**	**61.0**	**71.9**	**101.3**
Buffalo	78.0	77.2	84.2	79.1	59.3	70.1	102.8
Newark	80.6	80.6	86.0	81.1	62.0	74.0	100.6
New York	79.9	79.9	84.3	81.1	63.0	73.5	101.1
Philadelphia	80.0	79.8	87.3	81.5	60.9	72.3	100.1
Pittsburgh	78.2	77.2	83.8	77.4	57.5	68.3	103.9
Rochester	78.2	78.5	85.8	79.1	57.5	69.2	99.5
Scranton	75.5	74.2	82.0	76.8	59.1	68.6	102.4
East North Central	**79.7**	**79.2**	**86.6**	**80.1**	**58.4**	**70.4**	**103.1**
Chicago	79.9	79.3	87.7	80.7	60.0	74.8	104.9
Cincinnati	79.4	79.7	89.6	82.6	59.9	71.9	105.5
Cleveland	79.8	78.6	83.9	79.4	57.3	66.8	99.7
Columbus, Ohio	77.3	77.8	87.5	80.5	57.8	71.2	100.9
Detroit	80.2	80.3	85.9	80.0	55.3	64.6	101.8
Indianapolis	78.2	77.8	87.9	78.1	57.4	68.3	104.2
Milwaukee	83.7	82.4	88.8	81.6	62.8	74.2	104.9
Peoria	79.0	79.4	88.1	80.4	58.5	69.9	102.3
Springfield, Ill	75.9	75.3	86.8	77.9	57.2	67.8	101.2
West North Central	**81.0**	**80.9**	**91.0**	**82.3**	**58.9**	**70.9**	**103.4**
Kansas City	78.6	79.7	90.2	79.8	61.6	70.7	102.6
Minneapolis	84.1	83.7	95.6	85.9	57.3	72.0	104.8
Omaha	76.5	76.4	86.4	78.8	56.2	68.4	101.2
St. Louis	83.6	82.7	91.9	83.9	59.5	71.8	104.4
St. Paul	80.3	80.5	90.4	82.3	57.2	70.3	102.7
South Atlantic	**77.1**	**77.5**	**84.2**	**78.8**	**58.4**	**68.7**	**99.7**
Atlanta	71.5	72.5	82.1	75.2	54.6	65.7	102.2
Baltimore	82.8	82.8	88.0	83.0	61.4	70.2	97.9
Charleston, S. C	77.9	79.1	83.9	79.4	57.2	70.5	99.1
Jacksonville	76.0	76.5	80.4	76.5	52.9	63.8	94.2
Norfolk	76.1	76.3	85.4	79.5	57.3	72.0	104.4
Richmond	72.2	72.6	82.4	75.4	56.2	66.5	99.9
Savannah	77.6	77.9	83.6	78.6	57.7	67.3	101.2
Washington	79.6	79.8	85.0	80.8	63.1	71.7	100.8
East South Central	**73.0**	**73.6**	**82.7**	**73.9**	**55.8**	**65.7**	**100.4**
Birmingham	68.4	69.3	78.8	69.8	53.4	62.5	97.1
Louisville	82.6	82.5	91.5	82.5	60.0	70.5	107.4
Memphis	74.9	75.6	84.0	75.7	57.1	68.9	100.1
Mobile	75.1	73.7	81.3	73.9	57.4	66.7	99.4
West South Central	**77.2**	**77.1**	**83.7**	**77.0**	**58.6**	**68.4**	**101.6**
Dallas	73.6	72.9	81.8	75.7	56.7	67.1	103.7
Houston	77.5	77.8	83.4	76.1	58.1	66.1	98.4
Little Rock	73.9	75.2	85.7	76.7	54.4	63.6	102.0
New Orleans	82.5	82.4	86.3	81.0	63.0	74.7	102.9
Mountain	**81.1**	**80.6**	**91.5**	**82.4**	**60.1**	**69.8**	**98.0**
Butte	77.6	76.6	85.3	78.1	58.7	68.1	99.6
Denver	84.0	83.1	93.9	84.7	62.6	72.0	98.2
Salt Lake City	77.0	77.3	89.0	79.4	56.2	66.6	97.1
Pacific	**76.7**	**76.5**	**85.6**	**77.1**	**62.0**	**70.6**	**99.0**
Los Angeles	71.5	71.4	83.4	72.8	59.3	66.1	97.4
Portland, Oreg	80.3	79.9	88.5	79.0	60.0	69.2	98.0
San Francisco	81.1	80.9	86.4	80.6	66.3	76.0	101.8
Seattle	79.1	78.5	88.9	79.7	60.4	71.3	97.9

[1] Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for regions and for the United States with the use of population weights.

[2] Preliminary.

The Bureau of Labor Statistics collects prices in eight cities that cannot be included in the food-cost indexes, since no prices are available for the 1923–25 base period. These cities were selected from areas which were not adequately represented by the 51 cities in the current food-cost indexes.

Average prices for each of these cities for which data were available have been released since June 1935. Consumption weights have been provided for these cities, making it possible to measure changes in food costs from one period to another. Percentage changes in food costs between February and March 1938 are shown in table 4 for seven of these eight cities.

TABLE 4.—*Percentage Changes in Retail Food Costs for Specified Cities, March 1938, Compared With February 1938*

Region and city	Percentage change Mar. 15, 1938, compared with Feb. 15, 1938								
	All foods	Cereals and bakery products	Meats	Dairy products	Eggs	Fruits and vegetables	Beverages and chocolate	Fats and oils	Sugar and sweets
West North Central:									
Cedar Rapids	+0.1	+0.1	+1.6	−0.4	+0.5	−0.4	−0.3	−2.1	−0.4
Sioux Falls	+2.8	+.2	+4.3	−.2	+11.3	+7.8	−.4	+.7	+1.2
Wichita	+1.0	+.3	+1.9	−.4	+12.2	+1.1	+.8	+.6	−1.3
South Atlantic: Winston-Salem	−2.9	+.1	−2.2	−2.5	−24.1	−2.4	−1.5	−2.2	+.2
East South Central: Jackson	+.3	+.4	+2.4	+2.4	−1.1	−3.3	−.3	+3.0	−.6
West South Central:									
El Paso	−.8	+.1	−1.1	−.2	−1.0	−2.5	+1.1	−.7	+.5
Oklahoma City	+.7	+.8	+3.6	−1.0	−8.4	+2.8	+.5	−2.3	−2.3

ELECTRICITY PRICES, MARCH 15, 1938

RESIDENTIAL rates for electricity are secured quarterly from 51 cities. These rates are used for computing average prices and typical bills in each city for the quantities of electricity which most nearly approximate the consumption requirements for the usual domestic services for a five-room house, including living room, dining room, kitchen, and two bedrooms. The blocks of consumption which have been selected as representative of average conditions throughout the country are 25 and 40 kilowatt-hours for the use of electricity for lighting and small appliances alone; 100 kilowatt-hours for lighting, small appliances, and a refrigerator; and 250 kilowatt-hours for the addition of an electric range to the preceding equipment.

The technical specifications which are used as the basis for the application of the rate schedules are:

	Watts
Floor area (1,000 square feet).	
Connected load:	
Lighting and appliances	700
Refrigeration	300
Cooking	6,000
Measured demand:	
Lighting and appliances	600
Refrigeration	100
Cooking	2,300
Outlets: Fourteen 50-watt.	
Active room count: In accordance with schedule of rates.	

Price Changes Between December 15, 1937, and March 15, 1938

Prices of electricity for domestic use decreased in 8 of the 51 cities between December 1937 and March 1938, and advanced in 1, Philadelphia, where the cost to consumers was increased 2 percent by the introduction of a city sales tax. All of these nine cities are in the central or eastern areas.

In seven of the eight cities, rate reductions were most beneficial to customers using small amounts of current, with decreases for the use of 25 kilowatt-hours for lighting and small appliances, amounting to more than 9 percent in six cities. The greatest reductions for this service occurred in Minneapolis and St. Paul, where the cost dropped 19.4 percent and 21.9 percent respectively. Lowered costs in Birmingham applied only to customers served under the "Immediate" rate. There was no change in the "Objective" rate. Slighter decreases in Newark ranged from 0.6 percent for 250 kilowatt-hours to 2.0 percent for 40 kilowatt-hours. In Washington rate reductions available to customers using more than 50 kilowatt-hours per month provided decreases of 8.1 percent for 100 kilowatt-hours and 9.7 percent for 250 kilowatt-hours.

Changes in net monthly bills and average prices of electricity between December 15, 1937, and March 15, 1938, are shown in table 5 for nine cities.

TABLE 5.—*Changes in Retail Prices of Electricity Between Dec. 15, 1937, and Mar. 15, 1938—Monthly Bill, Price per Kilowatt-Hour, and Percentage Change*

Region, city, and date	Type of ownership [1]	Net monthly bill				Net monthly price per kilowatt-hour			
		25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours
		Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range	Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range
Middle Atlantic:									
Newark:						*Cents*	*Cents*	*Cents*	*Cents*
Dec. 15, 1937	P	$1.84	$2.54	$4.44	$8.69	7.4	6.4	4.4	3.5
Mar. 15, 1938	P	$1.81	$2.49	$4.39	$8.64	7.2	6.2	4.4	3.5
Percentage change [2]		−1.6	−2.0	−1.1	−0.6				
Philadelphia:									
Dec. 15, 1937	P	$1.40	$2.15	$3.76	$6.76	5.6	5.4	3.8	2.7
Mar. 15, 1938 [3]	P	$1.43	$2.19	$3.84	$6.90	5.7	5.5	3.8	2.8
Percentage change [2]		+2.0	+2.0	+2.0	+2.0				
East North Central:									
Peoria:									
Dec. 15, 1937	P	$1.50	$2.01	$3.57	$6.32	6.0	5.0	3.6	2.5
Mar. 15, 1938	P	$1.25	$1.84	$3.34	$6.09	5.0	4.6	3.3	2.4
Percentage change [2]		−16.7	−8.5	−6.4	−3.6				
West North Central:									
Minneapolis:									
Dec. 15, 1937	P	$1.47	$1.99	$3.61	$6.60	5.9	5.0	3.6	2.6
Mar. 15, 1938	P	$1.19	$1.76	$3.56	$6.65	4.7	4.4	3.6	2.7
Percentage change [2]		−19.4	−11.9	−1.3	+0.7				
St. Paul:									
Dec. 15, 1937	P	$1.60	$2.15	$3.85	$7.00	6.4	5.4	3.9	2.8
Mar. 15, 1938	P	$1.25	$1.85	$3.75	$7.00	5.0	4.6	3.8	2.8
Percentage change [2]		−21.9	−14.0	−2.6					
South Atlantic:									
Norfolk:									
Dec. 15, 1937	P	$1.38	$2.10	$4.65	$7.65	5.5	5.3	4.7	3.1
Mar. 15, 1938	P	$1.25	$2.00	$4.63	$7.63	5.0	5.0	4.6	3.1
Percentage change [2]		−9.1	−4.8	−0.5	−0.3				
Richmond:									
Dec. 15, 1937	P	$1.38	$2.10	$4.65	$7.65	5.5	5.3	4.7	3.1
Mar. 15, 1938	P	$1.25	$2.00	$4.63	$7.63	5.0	5.0	4.6	3.1
Percentage change [2]		−9.1	−4.8	−0.5	−0.3				
Washington, D. C.:									
Dec. 15, 1937	P	$0.98	$1.56	$3.10	$5.65	3.9	3.9	3.1	2.3
Mar. 15, 1938	P	$0.98	$1.56	$2.85	$5.10	3.9	3.9	2.9	2.0
Percentage change [2]				−8.1	−9.7				
East South Central:									
Birmingham:									
Immediate: [4]									
Dec. 15, 1937	P	$1.25	$2.00	$3.75	$7.30	5.0	5.0	3.8	2.9
Mar. 15, 1938	P	$1.13	$1.80	$3.50	$7.05	4.5	4.5	3.5	2.8
Percentage change [2]		−10.0	−10.0	−6.7	−3.4				

[1] Type of ownership is indicated as follows: P, private utility; M, municipal plant.
[2] Net monthly bills are computed to mills for purposes of comparison.
[3] Prices include a 2-percent sales tax.
[4] No change in "Objective" rate.

GAS PRICES, MARCH 15, 1938

RESIDENTIAL rates for gas are secured from 50 cities. These rates are used in computing average prices and typical bills for each city for quantities of gas which approximate the average residential consumption requirements for each of four combinations of services. These prices are published quarterly for March, June, September, and December.

In order to put the rate quotations upon a comparable basis it is necessary to convert the normal consumption requirements used for computing monthly bills into an equivalent heating value expressed in therms (1 therm=100,000 B. t. u.). This procedure is necessary because of the wide range in the heating value of a cubic foot of gas between different cities. The equipment and blocks of consumption which have been selected as representative of average conditions throughout the country are based upon the requirements of a five-room house, including living room, dining room, kitchen, and two bedrooms.

These specifications are:	*Therms*
Range	10. 6
Range and manual-type water heater	19. 6
Range and automatic-storage or instantaneous type water heater	30. 6
Range, automatic-storage or instantaneous type water heater, and refrigerator	40. 6

Price Changes Between December 15, 1937, and March 15, 1938

Changes in prices of gas between December 1937 and March 1938 occurred in four cities in the north central and eastern areas. Prices advanced in two of these cities and decreased in two. The increase of 2 percent in Philadelphia resulted from the introduction of a city sales tax of like amount. In Chicago, the price for the first 2 therms was advanced from 58 cents to 90 cents by court decree. This initial charge represents a combination of service and commodity charges, and also establishes a minimum bill for general domestic service. As a result of the increase in the initial charge, the costs for each of the four services showed graduated advances of from 5.9 percent for the use of 40.6 therms to 16.5 percent for 10.6 therms. The introduction of a new rate schedule in Springfield, Ill., available to customers whose equipment includes appliances for automatic water heating or space heating, lowered the costs approximately 3.5 percent for the use of from 30.6 to 40.6 therms. Rate reductions affecting each of the four services were reported for Jacksonville, with the greatest benefit, a decrease of 9.6 percent, accruing to customers using 19.6 therms.

The decrease in Minneapolis between September and December 1937, which averaged a little more than 1 percent, was due to an adjustment under the city franchise for October 1, 1937. Adjustments are made every 4 months in order that the company may earn an allowable return as defined by the franchise.

Changes in net monthly bills for gas between December 15, 1937, and March 15, 1938, are shown in table 6 for four cities; and between September 15 and December 15, 1937, for one city.

TABLE 6.—*Changes in Retail Prices of Gas Between Dec. 15, 1937, and Mar. 15, 1938—Monthly Bills and Prices per Thousand Cubic Feet and per Therm for Specified Amounts of Gas*

Region and city	Kind of gas [1]	Heating value per cubic foot in British thermal units	Monthly consumption in cubic feet and net monthly bill based on specified numbers of therms [2]								Monthly price based on consumption of specified numbers of therms [2]							
			10.6 therms		19.6 therms		30.6 therms		40.6 therms		Per thousand cubic feet for—				Per therm for—			
			Range		Range and manual-type water heater		Range and automatic [3] water heater		Range, automatic [3] water heater, and refrigerator		10.6 therms	19.6 therms	30.6 therms	40.6 therms	10.6 therms	19.6 therms	30.6 therms	40.6 therms
			Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Range	Range and manual-type water heater	Range and automatic [3] water heater	Range, automatic [3] water heater, and refrigerator	Range	Range and manual-type water heater	Range and automatic [3] water heater	Range, automatic [3] water heater, and refrigerator
Middle Atlantic:											*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Cents*	*Cents*	*Cents*	*Cents*
Philadelphia:																		
Dec. 15, 1937	M	530	2,000	$1.80	3,700	$3.25	5,770	$5.00	7,660	$6.61	0.90	0.88	0.87	0.86	17.0	16.6	16.4	16.3
Mar. 15, 1938 [4]	M	530	2,000	$1.84	3,700	$3.31	5,770	$5.10	7,660	$6.74	.92	.89	.88	.88	17.3	16.9	16.7	16.6
Percentage change [5]				+2.0		+2.0		+2.0		+2.0								
East North Central:																		
Chicago:																		
Dec. 15, 1937	X	800	1,330	$1.94	2,450	$3.33	3,830	$4.69	5,080	$5.39	1.46	1.36	1.23	1.06	18.3	17.0	15.3	13.3
Mar. 15, 1938	X	800	1,330	$2.26	2,450	$3.65	3,830	$5.01	5,080	$5.71	1.70	1.49	1.31	1.12	21.3	18.6	16.4	14.1
Percentage change [5]				+16.5		+9.6		+6.8		+5.9								
Springfield, Ill.:																		
Dec. 15, 1937	N	1,000	1,060	$1.91	1,960	$3.36	3,060	$4.66	4,060	$5.56	1.80	1.71	1.52	1.37	18.0	17.1	15.2	13.7
Mar. 15, 1938	N	1,000	1,060	$1.91	1,960	$3.36	3,060	$4.47	4,060	$5.37	1.80	1.71	1.46	1.32	18.0	17.1	14.6	13.2
Percentage change [5]								−4.0		−3.4								
South Atlantic:																		
Jacksonville:																		
Dec. 15, 1937	M	535	1,980	$4.03	3,660	$6.34	5,720	$8.20	7,590	$9.88	2.03	1.73	1.43	1.30	38.0	32.4	26.8	24.3
Mar. 15, 1938	M	535	1,980	$3.97	3,660	$5.73	5,720	$7.59	7,590	$9.27	2.01	1.57	1.33	1.22	37.5	29.3	24.8	22.8
Percentage change [5]				−1.4		−9.6		−7.4		−6.2								
West North Central:																		
Minneapolis: [6]																		
Sept. 15, 1937	X	800	1,330	$1.98	2,450	$3.13	3,830	$4.54	5,080	$5.78	1.49	1.28	1.19	1.14	18.7	16.0	14.8	14.2
Dec. 15, 1937	X	800	1,330	$1.96	2,450	$3.09	3,830	$4.47	5,080	$5.69	1.47	1.26	1.17	1.12	18.5	15.8	14.6	14.0
Percentage change [5]				−1.0		−1.3		−1.5		−1.6								

[1] Different kinds of gas are indicated as follows: M, manufactured; N, natural; X, mixed manufactured and natural.
[2] Typical monthly consumption for each service for a 5-room house (1 therm = 100,000 B. t. u.).
[3] Automatic storage or instantaneous water heater.
[4] Prices include 2-percent sales tax.
[5] Net monthly bills are computed to mills for purposes of comparison.
[6] An adjustment of rates, effective Oct. 1, 1937, under the Minneapolis city franchise was not shown in prices published for December 1937.

Wholesale Prices

WHOLESALE PRICES IN MARCH 1938

FROM February to March, wholesale commodity prices declined 0.1 percent, continuing the downward movement which began last August. Sharp decreases in wholesale prices of hides, skins, and leather, together with seasonal declines in prices of coal, largely accounted for the drop. The all-commodity index is more than 9 percent below the level of a year ago.

Six of the ten major commodity groups declined during the month. The decreases ranged from 0.3 percent for housefurnishing goods to 1.2 percent for hides and leather products. Farm products and building materials advanced fractionally and foods and metals and metal products remained unchanged at the February level.

Wholesale prices of raw materials declined 0.5 percent to the lowest point reached since December 1934. Semimanufactured commodity prices also averaged lower. Following the sharp decrease from January to February, finished products prices in March moved fractionally upward.

TABLE 1.—*Comparison of Index Numbers of Wholesale Prices for March 1938 With February 1938 and March 1937*

[1926=100]

Commodity group	March 1938	February 1938	Change from a month ago	March 1937	Change from a year ago
			Percent		*Percent*
All commodities	79.7	79.8	−0.1	87.8	−9.2
Farm products	70.3	69.8	+.7	94.1	−25.3
Foods	73.5	73.5	.0	87.5	−16.0
Hides and leather products	93.6	94.7	−1.2	104.2	−10.2
Textile products	68.2	68.6	−.6	78.3	−12.9
Fuel and lighting materials	77.7	78.5	−1.0	76.2	+2.0
Metals and metal products	96.0	96.0	.0	96.0	.0
Building materials	91.5	91.1	+.4	95.9	−4.6
Chemicals and drugs	78.7	79.1	−.5	87.5	−10.1
Housefurnishing goods	87.7	88.0	−.3	88.4	−.8
Miscellaneous	74.4	74.8	−.5	79.5	−6.4
Raw materials	73.2	73.6	−.5	90.1	−18.8
Semimanufactured articles	75.6	76.1	−.7	89.6	−15.6
Finished products	83.4	83.3	+.1	86.4	−3.5
All commodities other than farm products	81.6	81.9	−.4	86.3	−5.4
All commodities other than farm products and foods	82.6	83.0	−.5	85.5	−3.4

The index for "All commodities other than farm products," marking the tendency in prices of nonagricultural commodities, fell 0.4 percent.

¹ Prices include 2-percent sales tax. ² Net monthly bills are computed to mills for purposes of comparison.
³ An adjustment of rates, effective Oct. 1, 1937, under the Minneapolis city franchise was not shown in prices published for December 1937.

The group of "All commodities other than farm products and foods," reflecting the movement in prices of industrial commodities, dropped 0.5 percent during the month.

A comparison of the March level of wholesale commodity prices with February 1938 and March 1937 is shown in table 1.

Wholesale Price Level in March

The downward movement in commodity prices continued through March when the all-commodity index dropped 0.1 percent. Although the decline was slight, it marked an 8-month period of steadily falling prices and it placed the all-commodity index at 79.7 percent of the 1926 average, the lowest point reached in the past 2 years. Compared with the March 1937 level, the all-commodity index declined 9.2 percent.

The hides and leather products group registered the greatest drop—1.2 percent. Fuel and lighting materials decreased 1.0 percent; textile products, 0.6 percent; chemicals and drugs and miscellaneous commodities, 0.5 percent; and housefurnishing goods, 0.3 percent. Farm products rose 0.7 percent and building materials advanced 0.4 percent. Foods and metals and metal products remained steady at the February level.

Each of the 10 major commodity groups except fuel and lighting materials and metals and metal products is below its year ago level. The declines range from less than 1 percent for housefurnishing goods to over 25 percent for farm products. Fuel and lighting materials are up 2.0 percent and metals and metal products are at the same level they were in March a year ago.

The number of price changes within each of the 10 major commodity groups which influenced the movement of the all-commodity index during March is shown in table 2.

TABLE 2.—*Number of Items Changing in Price from February to March 1938*

Commodity group	Increases	Decreases	No change
All commodities	84	245	484
Farm products	26	38	3
Foods	21	64	37
Hides and leather products	2	12	27
Textile products	12	35	67
Fuel and lighting materials	5	11	8
Metals and metal products	5	18	123
Building materials	6	23	57
Chemicals and drugs	4	11	74
Housefurnishing goods	0	7	54
Miscellaneous	3	26	34

The raw materials group index fell 0.5 percent, largely because of lower prices for grains, hides, skins, leather, coal, and crude rubber.

During the year period, March 1937 to March 1938, raw materials prices have declined 18.8 percent. Semimanufactured commodity prices decreased 0.7 percent and are 15.6 percent below their year ago level. Fluctuations in prices of finished products have been less pronounced. Following the sharp drop between January and February, the index advanced 0.1 percent. It is, however, 3.5 percent lower than it was a year ago.

According to the index for "All commodities other than farm products," wholesale prices of nonagricultural commodities dropped 0.4 percent and are 5.4 percent below the index of a year ago. Industrial commodity prices, as measured by the index for "All commodities other than farm products and foods," declined 0.5 percent during March and are 3.4 percent lower than in March 1937.

Wholesale market prices of farm products advanced 0.7 percent during March because of a 5.9 percent increase in the livestock and poultry subgroup. Sharp increases were reported in prices of cows, steers, hogs, sheep, lemons, and potatoes. Grains, on the other hand, declined 5.5 percent. Quotations were lower for barley, rye, wheat, calves, oranges, hay, dried beans, onions, sweet potatoes, and wool. Notwithstanding the recent advance, the farm products index—70.3—is 25.3 percent lower than it was a year ago.

In the foods group decreases of 2.8 percent in cereal products, 2.0 percent in dairy products, and 0.5 percent in fruits and vegetables were counter-balanced by an increase of 4.1 percent in meats with the result that the index remained unchanged at the February level. Higher prices were reported for hominy grits, bananas, fresh beef, lamb, mutton, and cured and fresh pork. Quotations were lower for butter, cheese, powdered milk, flour, corn meal, dried apricots, canned beans and spinach, veal, coffee, canned salmon, oleo oil, and edible tallow. The food index—73.5—is 16.0 percent below that of a year ago.

Pronounced decreases in prices of hides, skins, leather, and harness caused the hides and leather products group index to fall 1.2 percent. No changes were reported in prices of shoes.

Weakening prices of work clothing, cotton goods, hosiery and underwear, and woolen and worsted goods caused the textile products group index to decline 0.6 percent to the lowest level reached since July 1933. Raw silk, manila hemp, sisal, and cotton twine prices advanced sharply.

As a result of decreases of 3.6 percent for bituminous coal, 0.6 percent for anthracite, and 0.2 percent for petroleum products the fuel and lighting materials group index dropped 1.0 percent. Average wholesale prices of coke were steady.

In the metals and metal products group lower prices for scrap steel, pig lead, quicksilver, pig zinc, and certain plumbing and heating fix-

tures were offset by higher prices for other items in the group. The index remained at 96.0. A sharp increase was reported in prices of malleable iron castings. Agricultural implements and motor vehicles remained unchanged at the previous month's level.

The building materials group advanced 0.4 percent. Higher prices were reported for hemlock and Ponderosa pine lumber, yellow pine timbers, red cedar shingles, and turpentine. Prices of tile, spruce, poplar, and gum lumber, certain paint materials, and prepared roofing averaged lower. Cement and structural steel prices were firm.

The index for the chemicals and drugs group declined 0.5 percent, because of weakening prices for denatured alcohol, strychnine, fats and oils, fertilizer materials, and mixed fertilizers.

Average wholesale prices of furnishings, principally blankets and floor covering, dropped 0.7 percent during the month and caused the housefurnishing goods group index to decline 0.3 percent.

During March crude rubber prices decreased 6.0 percent, cattle feed declined 1.8 percent, and paper and pulp dropped 1.0 percent.

Index numbers for the groups and subgroups of commodities for February and March 1938 and for March of each of the past 7 years are shown in table 3.

TABLE 3.—*Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities*

[1936=100]

Group and subgroup	March 1938	February 1938	March 1937	March 1936	March 1935	March 1934	March 1933	March 1932	March 1931
All commodities	**79.7**	**79.8**	**87.8**	**79.6**	**79.4**	**73.7**	**60.2**	**66.0**	**76.0**
Farm products	**70.3**	**69.8**	**94.1**	**76.5**	**78.3**	**61.3**	**42.8**	**50.2**	**70.6**
Grains	69.0	73.0	113.2	75.6	82.8	62.3	36.0	43.5	59.3
Livestock and poultry	82.7	78.1	93.7	88.3	85.8	49.5	43.0	51.4	70.7
Other farm products	62.8	63.5	88.5	69.1	72.1	67.7	45.3	52.1	74.2
Foods	**73.5**	**73.5**	**87.5**	**80.1**	**81.9**	**67.3**	**54.6**	**62.3**	**77.6**
Dairy products	76.7	78.3	90.2	80.3	82.9	68.9	50.9	64.2	83.5
Cereal products	80.9	83.2	90.1	85.8	92.1	85.3	62.7	68.3	74.5
Fruits and vegetables	56.5	56.8	86.5	65.1	63.2	71.6	54.3	62.3	74.3
Meats	81.6	78.4	92.0	89.7	91.6	56.5	50.5	61.4	82.0
Other foods	65.9	66.7	78.2	72.4	73.4	63.5	55.8	57.1	71.4
Hides and leather products	**93.6**	**94.7**	**104.2**	**94.9**	**85.4**	**88.7**	**68.1**	**77.3**	**87.6**
Shoes	104.6	104.6	102.3	100.4	97.2	98.5	83.2	88.5	94.9
Hides and skins	69.5	74.6	118.5	91.0	66.6	73.4	41.4	44.7	62.1
Leather	83.3	84.4	97.1	85.0	74.2	79.7	55.6	73.4	88.4
Other leather products	102.2	102.4	101.7	95.4	84.6	86.7	77.9	98.8	102.0
Textile products	**68.2**	**68.6**	**78.3**	**70.8**	**69.4**	**76.5**	**51.3**	**58.0**	**70.0**
Clothing	84.6	85.8	84.8	80.7	78.5	87.2	61.3	66.1	78.1
Cotton goods	67.5	67.6	94.0	77.1	82.4	89.1	50.0	56.2	72.4
Hosiery and underwear	60.3	60.9	64.9	62.1	62.5	65.6	47.1	54.9	63.8
Silk and rayon	28.8	28.5	33.6	30.9	27.3	29.4	25.5	33.5	45.8
Woolen and worsted goods	80.2	81.0	92.6	83.8	73.1	84.0	53.2	62.7	71.8
Other textile products	67.0	67.0	66.5	67.2	67.7	78.5	66.7	69.5	77.0
Fuel and lighting materials	**77.7**	**78.5**	**76.2**	**76.2**	**73.0**	**71.4**	**62.9**	**67.9**	**68.3**
Anthracite	79.3	79.8	77.8	82.5	81.1	81.2	88.3	89.9	88.4
Bituminous coal	99.5	103.2	97.5	99.4	96.3	91.1	79.3	83.5	86.0
Coke	105.5	105.5	97.7	93.7	88.8	83.4	75.2	80.4	83.7
Electricity	(1)	(1)	77.8	84.4	88.3	88.5	100.5	104.4	95.9
Gas	(1)	82.9	79.8	84.4	88.6	89.4	96.6	97.5	94.6
Petroleum products	57.9	58.0	58.6	56.0	49.8	48.7	33.1	39.8	41.8

[1] Data not available.

TABLE 3.—*Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities*—Continued

[1926=100]

Group and subgroup	March 1938	February 1938	March 1937	March 1936	March 1935	March 1934	March 1933	March 1932	March 1931
Metals and metal products	**96.0**	**96.0**	**96.0**	**86.6**	**85.7**	**87.1**	**77.2**	**80.8**	**86.4**
Agricultural implements	96.2	96.2	93.1	94.2	93.6	85.2	83.1	85.0	94.3
Farm machinery	97.7	97.7	94.0	92.3	91.6	(1)	(1)	(1)	(1)
Iron and steel	99.4	99.3	97.5	86.3	86.0	86.3	76.4	79.7	85.4
Motor vehicles [2]	95.6	95.6	86.3	(1)	(1)	(1)	(1)	(1)	(1)
Nonferrous metals	71.6	72.1	101.1	69.9	67.1	66.3	47.9	50.5	69.3
Plumbing and heating	78.9	79.6	77.6	73.8	67.2	72.7	59.4	64.4	86.6
Building materials	**91.5**	**91.1**	**95.9**	**85.3**	**84.9**	**86.4**	**70.3**	**73.2**	**82.5**
Brick and tile	91.1	91.5	91.8	88.9	90.2	88.5	74.9	79.3	85.0
Cement	95.5	95.5	95.5	95.5	94.4	93.9	81.8	75.0	84.1
Lumber	91.3	91.0	102.1	82.6	79.9	86.4	57.8	61.5	74.7
Paint and paint materials	82.2	79.2	83.9	79.2	79.4	79.7	68.4	75.4	81.4
Plumbing and heating	78.9	79.6	77.6	73.8	67.2	72.7	59.4	64.4	86.6
Structural steel	114.9	114.9	112.9	92.0	92.0	86.8	81.7	79.7	84.3
Other building materials	94.8	95.3	98.9	88.5	90.1	89.9	78.4	80.6	87.6
Chemicals and drugs	**78.7**	**79.1**	**87.5**	**79.3**	**81.5**	**75.7**	**71.2**	**75.3**	**82.9**
Chemicals	83.2	83.6	95.3	85.9	88.1	79.0	79.3	80.9	86.4
Drugs and pharmaceuticals	73.8	73.9	83.0	73.0	73.0	71.9	54.8	59.7	64.8
Fertilizer materials	71.8	72.3	70.3	64.8	66.3	69.5	61.9	68.6	80.8
Mixed fertilizers	71.6	72.3	71.7	68.3	72.8	72.6	60.1	73.2	88.7
Housefurnishing goods	**87.7**	**88.0**	**88.4**	**81.4**	**80.7**	**81.4**	**72.2**	**77.1**	**88.0**
Furnishings	91.6	92.2	91.7	84.9	84.1	83.2	72.9	75.4	84.5
Furniture	83.7	83.7	85.0	77.9	77.3	79.8	71.8	79.1	91.9
Miscellaneous	**74.4**	**74.8**	**79.5**	**68.3**	**69.2**	**69.3**	**58.9**	**64.7**	**72.0**
Automobile tires and tubes	57.4	57.4	55.0	45.0	46.6	44.6	41.3	39.2	46.9
Cattle feed	85.1	86.7	135.0	67.9	102.2	79.6	47.3	52.4	82.1
Paper and pulp	88.8	89.7	90.2	80.3	80.6	82.7	72.2	76.8	82.6
Rubber, crude	28.4	30.2	50.9	32.9	23.5	22.8	6.3	7.2	16.0
Other miscellaneous	82.1	82.2	84.8	80.6	80.1	83.2	72.6	84.5	89.6
Raw materials	73.2	73.6	90.1	77.4	76.6	65.9	49.4	56.1	69.5
Semimanufactured articles	75.6	76.1	89.6	74.4	71.8	74.3	56.9	60.8	72.9
Finished products	83.4	83.3	86.4	81.3	81.7	77.2	65.7	71.5	79.6
All commodities other than farm products	81.6	81.9	86.3	80.2	79.5	76.2	63.8	69.3	77.2
All commodities other than farm products and foods	82.6	83.0	85.5	78.9	77.3	78.5	65.8	70.9	77.2

[1] Date not available.
[2] Preliminary revision.

Index Numbers By Commodity Groups, 1936 to March 1938

Index numbers of wholesale prices by commodity groups, by years from 1926 to 1937, inclusive, and by months from January 1937 to March 1938, inclusive, are shown in table 4.

The price trend since 1926 is shown in table 5 for the following groups of commodities: Raw materials, semimanufactured articles, finished products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Finished products" was given in the December 1937 issue of the Wholesale Price pamphlet.

TABLE 4.—*Index Numbers of Wholesale Prices, by Groups of Commodities*

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1934	65.3	70.5	86.6	72.9	73.3	86.9	86.2	75.9	81.5	69.7	74.9
1935	78.8	83.7	89.6	70.9	73.5	86.4	85.3	80.5	80.6	68.3	80.0
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	80.4	81.7	70.5	80.8
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	83.9	89.7	77.8	86.3
By months:											
1937:											
January	91.3	87.1	101.7	77.5	76.6	90.9	91.3	87.7	86.5	76.2	85.9
February	91.4	87.0	102.7	77.5	76.8	91.7	93.3	87.8	87.9	77.3	86.3
March	94.1	87.5	104.2	78.3	76.2	96.0	95.9	87.5	88.4	79.5	87.8
April	92.2	85.5	106.3	79.5	76.8	96.5	96.7	86.9	89.0	81.1	88.0
May	89.8	84.2	106.7	78.7	77.2	95.8	97.2	84.5	89.3	80.5	87.4
June	88.5	84.7	106.4	78.2	77.5	95.9	96.9	83.6	89.5	79.4	87.2
July	89.3	86.2	106.7	78.3	78.1	96.1	96.7	83.9	89.7	79.0	87.9
August	86.4	86.7	108.1	77.1	78.4	97.0	96.3	82.2	91.1	77.3	87.5
September	85.9	88.0	107.6	75.3	78.7	97.1	96.2	81.4	91.1	77.0	87.4
October	80.4	85.5	106.7	73.5	78.5	96.4	95.4	81.2	91.0	76.2	85.4
November	75.7	83.1	101.4	71.2	78.2	96.8	93.7	80.2	90.4	75.4	83.3
December	72.8	79.8	97.7	70.1	78.4	96.3	92.5	79.5	89.7	75.0	81.7
1938:											
January	71.6	76.3	96.7	69.7	78.3	96.6	91.8	79.6	88.3	75.2	80.9
February	69.8	73.5	94.7	68.6	78.5	96.0	91.1	79.1	88.0	74.8	79.8
March	70.3	73.5	93.6	68.2	77.7	96.0	91.5	78.7	87.7	74.4	79.7

TABLE 5.—*Index Numbers of Wholesale Prices, by Special Groups of Commodities*

[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
1926	100.0	100.0	100.0	100.0	100.0
1927	96.5	94.3	95.0	94.6	94.0
1928	99.1	94.5	95.9	94.8	92.9
1929	97.5	93.9	94.5	93.3	91.6
1930	84.3	81.8	88.0	85.9	85.2
1931	65.6	69.0	77.0	74.6	75.0
1932	55.1	59.3	70.3	68.3	70.2
1933	56.5	65.4	70.5	69.0	71.2
1934	68.6	72.8	78.2	76.9	78.4
1935	77.1	73.6	82.2	80.2	77.9
1936	79.9	75.9	82.0	80.7	79.6
1937	84.8	85.3	87.2	86.2	85.3
1937:					
January	88.1	85.4	84.9	84.6	83.4
February	88.3	85.5	85.4	85.0	84.1
1937—Continued.					
March	90.1	89.6	86.4	86.3	85.5
April	88.7	89.5	87.4	86.9	86.5
May	87.1	87.5	87.5	86.7	86.3
June	86.1	86.8	87.7	86.8	86.1
July	86.5	87.0	88.8	87.5	86.3
August	84.8	86.6	89.0	87.6	86.1
September	84.4	85.3	89.1	87.6	85.9
October	80.7	82.5	88.1	86.4	85.1
November	77.2	79.8	86.7	84.8	84.3
December	75.4	77.7	85.3	83.5	83.6
1938:					
January	74.9	76.9	84.3	82.8	83.5
February	73.6	76.1	83.3	81.9	83.0
March	73.2	75.6	83.4	81.6	82.6

Weekly Fluctuations

Following a slight upturn early in March, the all-commodity index declined sharply during the latter part of the month. Weakening prices of farm products and foods were largely responsible for the decrease.

Farm products prices registered pronounced gains through the week ended March 12, but fell sharply the last two weeks of the month. Foods followed much the same trend as did farm products. The changes, however, were less striking. Hides and leather products fell steadily throughout the month. After advancing fractionally between the last week of February and the first week of March, textile products prices moved to a slightly lower level. Seasonal declines in coal caused the fuel and lighting materials group to register a net decline of 1.0 percent from February 26 to March 26. Metals and metal products, building materials, and chemicals and drugs prices also averaged lower during the 4-week period. Housefurnishing goods remained firm and miscellaneous commodities prices, largely because of weakening prices for crude rubber, fell 0.8 percent from February 26 to March 26.

Weekly variations in the major group classifications during March are shown by the index numbers in table 6. The percentage changes from week to week are given in table 7.

TABLE 6.—*Weekly Index Numbers of Wholesale Prices, by Commodity Groups, February and March 1938*

[1926=100]

Commodity group	Mar. 26 1938	Mar. 19 1938	Mar. 12 1938	Mar. 5 1938	Feb. 26 1938	Feb. 19 1938	Feb. 12 1938	Feb. 5 1938
All commodities	79.2	79.5	79.8	79.8	79.6	79.4	79.6	80.1
Farm products	69.6	70.5	71.7	71.1	70.2	69.6	70.1	70.9
Foods	73.1	73.4	73.8	73.8	73.5	73.3	73.2	74.5
Hides and leather products	93.7	94.2	94.2	94.3	94.6	94.9	95.6	95.9
Textile products	67.7	67.8	67.8	67.9	67.8	68.1	68.2	68.5
Fuel and lighting materials	78.1	78.1	78.3	78.3	78.9	78.6	78.7	78.8
Metals and metal products	96.0	96.1	96.1	96.2	96.2	96.2	96.2	96.1
Building materials	90.7	90.6	90.6	90.8	91.1	91.1	91.2	91.6
Chemicals and drugs	78.1	78.4	78.6	78.9	78.9	78.8	78.9	79.0
Housefurnishing goods	89.6	89.6	89.6	89.6	89.6	89.7	89.7	90.5
Miscellaneous	74.1	74.5	74.5	74.7	74.7	74.6	74.6	74.7
Raw materials	72.4	73.1	73.8	73.7	73.6	73.2	73.4	74.0
Semimanufactured articles	75.0	75.5	75.6	76.0	76.0	75.9	76.2	76.5
Finished products	83.5	83.5	83.6	83.7	83.4	83.2	83.3	83.8
All commodities other than farm products	81.4	81.5	81.6	81.7	81.7	81.6	81.7	82.1
All commodities other than farm products and foods	82.7	82.8	82.9	82.9	83.1	83.0	83.1	83.2

TABLE 7.—*Weekly Changes (Percent) During March 1938, by Groups of Commodities*

Commodity group	Percentage change from—				
	Feb. 26 to Mar. 26	Mar. 19 to Mar. 26	Mar. 12 to Mar. 19	Mar 5 to Mar. 12	Feb. 26 to Mar. 5
All commodities	−0.5	−0.4	−0.4	0.0	+0.3
Farm products	−.9	−1.3	−1.7	+.8	+1.3
Foods	−.5	−.4	−.5	.0	+.4
Hides and leather products	−1.0	−.5	.0	−.1	−.3
Textile products	−.1	−.1	.0	−.1	+.1
Fuel and lighting materials	−1.0	.0	−.3	.0	−.8
Metals and metal products	−.2	−.1	.0	−.1	.0
Building materials	−.4	+.1	.0	−.2	−.3
Chemicals and drugs	−1.0	−.4	−.3	−.4	.0
Housefurnishing goods	.0	.0	.0	.0	.0
Miscellaneous	−.8	−.5	.0	−.3	.0
Raw materials	−1.6	−1.0	−.9	+.1	+.1
Semimanufactured articles	−1.3	−.7	−.1	−.5	0
Finished products	+.1	.0	−.1	−.1	+.4
All commodities other than farm products	−.4	−.1	−.1	−.1	.0
All commodities other than farm products and foods	−.5	−.1	−.1	.0	−.2

Monthly Average Wholesale Prices and Index Numbers of Individual Commodities

The table showing average wholesale prices and index numbers of individual commodities formerly appearing monthly in the Wholesale Price pamphlet is now published semiannually in the June and December issues. The December 1937 issue showed the data for the year 1937 and for the last 6 months of 1937. The monthly figures will be furnished currently upon request.

January 1938 Supplement—Specifications of Commodities

Surveys of wholesale prices for several items and industries have been completed, and reports covering the findings have been issued or are in preparation. Beginning with January 1938 certain items formerly included in the Bureau's weighted index numbers of wholesale prices have been replaced by other items, for which specifications and related pertinent information are given in a mimeographed report. Copies of this report are available upon request.

The groups and subgroups affected are:

Textile products.—Hosiery and underwear (formerly "Knit goods," changes in underwear items).

Metals and metal products.—Agricultural implements—Farm machinery.

Miscellaneous.—Paper and pulp (changes in boxboard items) and Other miscellaneous (changes in soap items).

Recent Publications of Labor Interest

APRIL 1938

Age Distribution of Workers

Age of gainful white and Negro female workers of the United States, 1920 and 1930. By William M. Gafafer. Washington, U. S. Public Health Service, 1938. 13 pp., charts. (Studies on Age of Gainful Workers, No. 5; reprint No. 1896 from Public Health Reports, Jan. 7, 1938, pp. 4–16.)

Agriculture

Recent changes in social and economic status of farm families in North Carolina. By C. Horace Hamilton. Raleigh, North Carolina Agricultural Experiment Station, 1937. 180 pp., maps, charts. (Bulletin No. 309.)

Child Welfare

Child welfare legislation in Maryland, 1634–1936. By Edward J. O'Brien. Washington, Catholic University of America, 1937. 375 pp.

Historical development of social legislation in Maryland affecting children, from the founding of the colony in 1634 through the adoption, in 1935 and 1936, of laws based upon the National Social Security Act. The various phases of child welfare studied include institutional care of dependent and delinquent children, provision for the handicapped, illegitimacy, adoption, education, and child labor. An extensive bibliography, also classified by type of welfare activity, is included.

Civil Service

The German Civil Service Act. By James K. Pollock and Alfred V. Boerner, Jr. Chicago, Civil Service Assembly of United States and Canada, 1938. 54 pp.

English translation of text of the act, brief discussion of its provisions, selections from the National Service Disciplinary Code, and schedule of salary groups in the German civil service.

Construction Industry

Les variations du mouvement saisonnier dans l'industrie de la construction: Étude méthodologique et analyse des faits. By Horst Mendershausen. Geneva, Librairie de l'Université de Genève, 1937. 209 pp., charts, bibliography.

An analytical study of seasonal fluctuations in the construction industry in various countries.

Consumer Problems

References and summaries of standards, specifications and test methods for selected consumer commodities. Washington, U. S. Consumers' Project, 1937. 43 pp.; mimeographed.

Cooperative Movement

Cooperation—an American way. By John Daniels. New York, Covici-Friede, 1938. 399 pp.

Traces the development of the cooperative movement, beginning with the mutual insurance associations formed as early as 1820, continuing with the

various early Grange cooperative ventures of the 70's and 80's and the developments of the later nineteenth century and those of the present time. Shows the gradual development of "consumer consciousness" of the farmers (who were the pioneers of cooperation in this country) and the increasing place that consumer activities are taking in farmers' cooperation. The presentation of the various types of associations, local and federated, commercial and educational, as part of a unified movement, shows how each fits into the picture.

The place of cooperation in different economic systems. By Väinö Tanner. (In Annals of Collective Economy, Geneva, May–December 1937, pp. 240–265.)

Paper presented to fifteenth congress of International Cooperative Alliance by its president. Discusses position of the cooperative movement under the economic systems in totalitarian countries—Italy, Germany, Austria, and the Soviet Union—and in democratic countries. At the end of the paper is given the resolution adopted by the congress on the subject.

Interfaith conference on consumers' cooperatives. (In Information Service, Federal Council of Churches of Christ in America, New York, March 5, 1938, pp. 1–5.)

Summary of proceedings of the first two interfaith conferences on consumers' cooperatives, in which representatives of the various religious faiths, trade-union leaders, students, and cooperators participated.

The people's year book, 1938. Manchester, England, Cooperative Wholesale Society, [1938?]. 324 pp., illus.

Contains detailed data on the cooperative movement of Great Britain and summary information on cooperation in other countries, articles on the status of labor in Great Britain and the economic position of that country, and directories of social and cooperative organizations.

The development of international cooperative exchange. By A. J. Cleuet. (In Annals of Collective Economy, Geneva, May–December 1937, pp. 292–315.)

Paper presented at fifteenth congress of International Cooperative Alliance, by the president of the International Cooperative Wholesale Society. Describes cooperative wholesaling in various countries and the measures taken to further the international exchange of goods and services. The function of the International Cooperative Wholesale is not the actual exchange of these things, but to make available to the national wholesales information on cooperative commodities and other trade information.

Cooperative burial associations, 1936 (with typical bylaws). Washington, U. S. Bureau of Labor Statistics, 1938. 9 pp. (Serial No. R. 724, reprint from March 1938 Monthly Labor Review.)

Report of Rural Electrification Administration, 1937. Washington, 1938. 135 pp., maps, charts, illus.

An account of the work of the R. E. A., including data about the cooperative associations formed in rural areas to provide electric current there.

The economics of cooperative marketing. By Henry H. Bakken and Marvin A. Schaars. New York, McGraw-Hill Book Co., Inc., 1937. 583 pp.

Cost of Living

How we spend our money. By Maxwell S. Stewart. New York, Public Affairs Committee, Inc., 1938. 32 pp., charts. (Public Affairs Pamphlet No. 18.)

Based upon Government investigations of disbursements of wage earners and clerical workers, this study shows expenditures of typical families for food, shelter, clothing, and other items such as transportation, medical care, and recreation.

Expenditures for electrical appliances by workers in 42 cities. Washington, U. S. Bureau of Labor Statistics, 1938. 8 pp. (Serial No. R. 711, reprint from February 1938 Monthly Labor Review.)

Economic and Social Problems

Economic prospects, 1938 and after. By G. D. H. Cole. (In Fact, London, February 1938, pp. 5–86; charts.)

Number eleven of a new monthly series of small, popularly written volumes on contemporary questions. The author's analysis of world conditions is based

essentially on the difficulty encountered by private enterprise throughout the world in solving "its deepest contradiction, which is that it must perpetually strive to produce more than it can sell." He holds that as long as the expectation of expanding profit margins is the chief stimulus to increased employment and production, there is no permanent method of preventing the prices placed on products from exceeding the means of payment available to consumers.

An economic history of modern Britain: Machines and national rivalries (1887–1914) with an epilogue (1914–1929). By J. H. Clapham. Cambridge, England, University Press, 1938. 577 pp., charts.

The third volume of "An Economic History of Modern Britain," covering the period since 1820. Topics discussed in some detail, with special bearing on British labor, include the shifting character of industry due to changing techniques and international competition; the changing forms of organization, both of employers and of employees; and the growth of the economic activities of public agencies, national and local. There is a descriptive chapter devoted to life and labor in industrial Britain.

Rationalization and decasualization of dock labor in port of Rotterdam. By C. Mörzer Bruyns. (In International Labor Review, Geneva, February 1938, pp. 226–230.)

The people's front. By Earl Browder. New York, International Publishers Co., Inc., 1938. 354 pp.

Education and Training

Adult education: A dynamic for democracy. By Dorothy Hewitt and Kirtley F. Mather. New York, D. Appleton-Century Co., Inc., 1937. 193 pp., bibliography.

Discusses the setting which the authors consider conducive to the most effective functioning of adult education, and how such education can be made to work—methods and techniques, organization problems, administration, and the discovery and development of leadership.

Apprentice training program in diversified occupations for the enrichment of the high-school program. Lansing, Mich., State Board of Control for Vocational Educaton, 1937. 45 pp., illus. (Bulletin No. 231.)

The scheme described in this pamphlet is for communities in which youths attend school half-time and work half-time as apprentices in the last two years of their high-school course.

Michigan's plan for training apprentices: A training program for youths who have left school. Lansing, Mich., State Board of Control for Vocational Education, 1937. 13 pp.; mimeographed. (Bulletin No. 235.)

Some of the principal subjects discussed are requirements for entrance into an apprenticeship, employment status and wages of apprentices, school instruction, selection of apprentices, the apprenticeship agreement, approval of occupations by the State department of labor and industry, and cost of program to local school board.

Vocational training—problems and trends. (In International Labor Review, Geneva, February 1938, pp. 139–167.)

Standards of training, experience, and compensation in community recreation work. New York, National Recreation Association, 1938. 24 pp.

Report of special committee appointed to establish desirable standards of education and experience for positions in community recreation work.

Proceedings of seventy-fifth annual meeting of National Education Association of United States, held in Detroit, Mich., June 27 to July 1, 1937. Washington, National Education Association of the United States, [1938?]. 987 pp.

Among the subjects of addresses included in the volume are: Society's interest in human resources; teacher retirement; teachers' salaries; consumer cooperation and democratic ideals; problems of naturalization; growth and development of the community colleges; adult education; the Jacksonville plan of cooperative vocational education; vocational education in penal institutions; recent developments in apprenticeship training; and recent developments in industrial education.

Directory of colleges, universities, and professional schools offering training in occupations concerned with business and industry. Compiled by Grace Nichols and others. New London, Conn., Institute of Women's Professional Relations, 1937. 447 pp.; mimeographed.

Volume III in a series of directories of institutions offering specialized training in various parts of the United States. Volume I (1936) lists colleges, universities, and professional schools in which training in occupations concerned with health is available. Volume II (1936) lists courses offered in less standardized fields of education and in professions other than those concerned with health and the arts. Institutions are classified by States. Entrance requirements, length of courses, degrees conferred, tuition and fees, living expenses, and available loan funds and fellowships are reported for each institution.

List of publications of Office of Education, 1910–1936, including those of former Federal Board for Vocational Education for 1917–1933. Washington, U. S. Office of Education, 1937. 158 pp. (Bulletin, 1937, No. 22.)

Efficiency

The machine and the worker: A study of machine-feeding processes. By S. Wyatt and J. N. Langdon. London, Industrial Health Research Board, 1938. 45 pp., diagrams. (Report No. 82.)

Deals with the efficiency of workers, particularly on the type of machine the processes of which are largely dependent on the ability of the operator to keep it supplied with material.

Employment Service

Cincinnati's 4-point employment program. Cincinnati, Ohio State Employment Service, Cincinnati Employment Center, 1937. 15 pp.

Family Allowances

Première journée internationale des allocations familiales, Paris, 8 juillet 1937—compte rendu. Paris, Comité Central des Allocations Familiales, [1937?]. 192 pp.

Report of proceedings of first international conference on family allowances. Brief accounts of grants in Belgium, France, Hungary, Italy, Norway, Switzerland, and certain other countries are included. The reports and addresses are presented in English, French, German, and Italian.

Governmental Labor Activities

A quarter century of governmental labor activity. By Estelle Stewart. Washington, U. S. Bureau of Labor Statistics, 1938. 25 pp. (Serial No. R. 697, reprint from February 1938 Monthly Labor Review.)

Health and Industrial Hygiene

Health education of the public—a practical manual of technic. By W. W. Bauer, M. D., and Thomas G. Hull. Philadelphia, W. B. Saunders Co., 1937. 227 pp., illus.; bibliography.

Designed as a practical handbook for workers engaged in various adult health-education activities.

The need for a national health program: Report of Technical Committee on Medical Care. Washington, U. S. Interdepartmental Committee to Coordinate Health and Welfare Activities, 1938. 36 pp.

The causes and effects of occupational diseases—a guide book. Prepared by Engineering and Medical Departments of Fidelity and Casualty Co. of New York. New York, 1936. 16 pp.

A series of charts and tables showing occupational hazards. The charts show the hazardous and injurious materials commonly used in specific industries, and are arranged for checking the compensation-manual numbers which are assigned to each industry. The tables describe the characteristics, properties, and principal uses of various materials used in industry and the symptoms of exposure to those materials.

Housing

Basic principles of healthful housing. By Committee on Hygiene of Housing, American Public Health Association. (In American Journal of Public Health, New York, March 1938, pp. 351–372.)

Reviewed in this issue.

Urban blight and slums—economic and legal factors in their origin, reclamation, and prevention. By Mabel L. Walker. Cambridge, Harvard University Press, 1938. 442 pp., maps, illustrations; bibliography. (Harvard City Planning Studies, XII.)

In addition to a comprehensive discussion of blighted areas and slums, this volume offers correctional measures and touches upon a number of related housing subjects. Chapters are devoted to mortgages, rationalization of the house-building industry, the Federal Government's relation to housing, and European experience.

New housing estates and their social problems. London, National Council of Social Service, Community Centres and Associations Committee, 1937. 32 pp., plans, illus.

Considers the importance of the new housing "estates" in England and methods of providing for the welfare of residents.

The administration of rehousing in Manchester. By J. R. Jarmain. (In Public Administration, London, January 1938, pp. 63–72.)

A description of procedure followed in selection and placement of tenants.

Immigration

The Italians of New York. A survey prepared by workers of Federal Writers Project, Works Progress Administration in the City of New York. New York, Random House, 1938. 241 pp., illus.; bibliography.

Reviews the history of Italian immigration to New York and discusses the problems of the social adjustment of Italian immigrants in that metropolis; the share of Italo-Americans in the building and development of the city; their religious life, their civic and social life, their intellectual and cultural life; their achievements in the professions; their creative work and intellectual influence; their record in business and industry; and their amusements and entertainments.

The legal status of aliens in Pacific countries: An international survey of law and practice concerning immigration, naturalization, and deportation of aliens and their legal rights and disabilities. Edited by Norman MacKenzie. New York, etc., Oxford University Press, 1937. 374 pp. (Report in International Research Series of Institute of Pacific Relations.)

Industrial Accidents and Workmen's Compensation

Injury experience in 30 manufacturing industries, 1935 and 1936. By Roy F. Fleming and Jacob Lotven. Washington, U. S. Bureau of Labor Statistics, 1938. 11 pp. (Serial No. R. 685, reprint from March 1938 Monthly Labor Review.)

Causes and prevention of accidents in fertilizer industry, 1936. By Max D. Kossoris and Swen Kjaer. Washington, U. S. Bureau of Labor Statistics, 1938. 15 pp. (Serial No. R. 713, reprint from April 1938 Monthly Labor Review.)

Injury experience in iron and steel industry, 1935 and 1936. Washington, U. S. Bureau of Labor Statistics, 1938. 14 pp. (Serial No. R. 702, reprint from April 1938 Monthly Labor Review.)

Compte rendu sur les travaux du service de la prévention des accidents du travail au cours de l'année, 1937 (exercice 1936). Lille, Syndicat du Nord, Société d'Assurance mutuelle contre les Accidents du Travail, 1938. 71 pp.

Report on industrial accidents in textile industry in Département du Nord, France. Data are furnished on causes, frequency, and severity of accidents in the different branches of the industry.

Accidentes de trabajo [Argentina]. By Mariano R. Tissembaum. Santa Fe, Instituto Social de la Universidad Nacional del Litoral, 1936. 85 pp. (Temas Obreros, No. 1.)

Legal provisions for national and provincial compensation for accidents to various classes of workers in Argentina.

Wetenschappelijke balansen van het ongevallenfonds en van het landbouw-ongevallenfonds op 31 December 1936. Amsterdam, Rijksverzekeringsbank, 1937. 52 pp.

Report on administration in 1936 of the funds for insurance against accidents in industry and agriculture in the Netherlands.

Occupational-disease legislation in United States, 1936, with appendix for 1937. Washington, U. S. Bureau of Labor Statistics, 1938. 88 pp. (Bulletin No. 652.)

Industrial Relations

Second annual report of National Labor Relations Board, for fiscal year ended June 30, 1937. Washington, 1937. 172 pp.

Reviewed in this issue. Appended to the report is a list of references to material on the National Labor Relations Board.

Collective bargaining in Great Britain. By Dorothy Sells. (In American Federationist, Washington, March 1938, pp. 258–263.)

Describes the functioning of the British trade boards and joint industrial councils, and collective negotiations between organized workers and organized employers, through which wages and working conditions of approximately 77 percent of the workers of Great Britain are regulated.

International Labor Relations

International Labor Conference, twenty-third session, Geneva, 1937: Record of proceedings. Geneva, International Labor Office (American branch, 734 Jackson Place, Washington, D. C.), 1937. xxxiii, 881 pp.

Transcript in English and French of proceedings of the conference. Appendixes furnish texts of the resolutions, draft conventions, and recommendations adopted.

Le contrôle de l'application des conventions internationales du travail. By Jean Zarras. Paris, Librairie du Recueil Sirey, 1937. 386 pp. (Institut de Droit comparé de l'Université de Paris, Série de monographies de Droit public VII.)

Deals with problems of enforcement of international labor conventions in the different countries ratifying the conventions.

Labor and Employer Organizations

The labor movement in America. By Marjorie R. Clark and S. Fanny Simon. New York, W. W. Norton & Co., Inc., 1938. 208 pp.

After a brief review of industrial development and workers' movements from the beginning of the factory system in this country to the period of the World War, this history of the labor movement emphasizes particularly developments since 1929, including recent labor legislation, court decisions affecting labor, and the division in the labor movement following the creation of the Committee for Industrial Organization in 1935.

Union responsibility and incorporation of labor unions. By David J. Saposs. Washington, U. S. National Labor Relations Board, Division of Economic Research, 1938. 8 pp.; mimeographed.

Presents refutation of arguments used in support of various measures proposed for the purpose of bringing labor organizations under governmental supervision and regulation.

Twelfth report on organization in industry, commerce, and the professions in Canada, 1937. Ottawa, Department of Labor, 1938. 143 pp.

Gives date of formation, membership, objects, and names and addresses of chief executive officers of associations in the various groups covered.

Labor and Social Legislation

State labor legislation, 1937, including workmen's compensation legislation. Washington, U. S. Bureau of Labor Statistics, 1938. 31 pp. (Bulletin No. 654; reprint from January 1938 Monthly Labor Review.)

Laws limiting hours of employment for men, as of January 1, 1938. Washington, U. S. Bureau of Labor Statistics, 1938. 5 pp. (Serial No. R. 712, reprint from February 1938 Monthly Labor Review.)

High spots of State school legislation passed in 1937. Washington, National Education Association, 1938. 21 pp.; mimeographed.

Much attention was given to teacher welfare measures in 1937. Eleven States passed tenure legislation. Seventeen States enacted retirement laws, 6 establishing systems where no system had ever been in operation, 3 rewriting in toto the existing scheme, and 8 changing or extending plans previously adopted. In each of 4 States a resolution or law was passed creating a commission to study the subject of teacher retirement and formulate a proposal to be submitted at the next legislative session. Four States enacted minimum-salary laws.

Le mouvement social en 1937. By Henri Velge. (In Bulletin de l'Institut de Recherches Économiques, Louvain, Belgium, February 1938, pp. 87–99.)

Review of the social movement in Belgium in 1937, covering laws for protection of labor in regard to wages, night work of women, vacations with pay, hours of labor, and health and safety measures; legislation concerning industrial accidents, occupational diseases, disability and old-age pensions, and family allowances; and action on international labor conventions.

The Factories Act [Great Britain], 1937. By Leslie Maddock in collaboration with Sir Gerald Bellhouse. London, Eyre and Spottiswoode, 1937. xxviii, 684 pp.

Annotated text of an act passed by the British Parliament in 1937 codifying and amending existing factory legislation. The analysis gives comparisons with laws which the Factories Act of 1937 supplants, and explains the application and practical effect of specific terms. The text of regulations issued by the Home Office to amplify and supplement the health and safety provisions of the factory laws is reproduced. An appendix gives the text of related statutes, such as compulsory education and child-labor laws, and the various Truck Acts (requiring payment of wages in money).

Legislación social de Panama. Compiled by J. Agustín Castillo. Panama, Imprenta Nacional, 1936. 148 pp.

Compilation of laws, decrees, resolutions, and extracts from codes, through June 19, 1935, relating to the labor office, industrial accidents, labor inspection, regulation of working conditions, workers' housing, maternity aid, rural colonization through homesteads, protection of nationals, health, and retirement benefits.

Merchant Marine

Composition of labor force in merchant marine. By Frances Jones. Washington, U. S. Bureau of Labor Statistics, 1938. 6 pp. (Serial No. R. 705, reprint from February 1938 Monthly Labor Review.)

Migration

Population movements—a study in migration. By Louis Ginsburg. London, New Fabian Research Bureau, 1937. 36 pp.; bibliography. (NFRB No. 37.)

Discusses emigration from Great Britain, continental Europe, and Asia, the control of migration, and the case for regulation.

Nutrition

The foundations of nutrition. By Mary Swartz Rose. New York, Macmillan Co., 1938. 625 pp., charts, illus. 3 ed.

Each essential factor in an adequate diet is discussed in detail and reasons given for its inclusion in the daily program. The foods which are the best sources of these essentials are shown, as well as how much of a given dietary essential can be obtained from each in relation to the total day's requirement. Sample diets are given for adults, both active workers and those following sedentary callings, for young children, and for infants. The discussion is based on the most recent scientific knowledge of the elements and properties of the foods going to make up a satisfactory and adequate diet.

Arbeit und ernährung. Berlin, Julius Springer, 1937. 87 pp. (Beihefte zum Zentralblatt für Gewerbehygiene und Unfallverhütung, herausgegeben von der Deutschen Gesellschaft für Arbeitsschutz in Frankfurt a. m., Nr. 26.)

A collection of articles on workers and their nutrition in Germany, one dealing with production in relation to nutrition.

Old-Age Pensions

State employees' retirement system of New Jersey: Fifteenth annual report of board of trustees, June 30, 1937. Trenton, 1937. 32 pp.

Thirty-second annual report of Carnegie Foundation for Advancement of Teaching. New York, 1937. 202 pp.

The report includes data on retirement allowances for teachers and pensions for their widows granted by the Foundation from 1906 to June 30, 1937, inclusive.

Older Worker in Industry

Preliminary report of Joint Legislative Committee [New York] on Discrimination in Employment of Middle Aged. Albany, 1937. 49 pp. (Legislative document, 1938, No. 75.)

Reviewed in this issue.

Prices

Wholesale prices, December and year 1937. Washington, U. S. Bureau of Labor Statistics, 1938. 48 pp., charts. (Serial No. R. 700.)

Prices in Canada and other countries, 1937. Ottawa, Department of Labor, 1938. 23 pp. (Supplement to The Labor Gazette, January 1938.)

Includes data on retail and wholesale prices and cost of living, index numbers being shown in some tables from the year 1913.

English prices and public finance, 1660–1822. By Elizabeth Boody Schumpeter. (In Review of Economic Statistics, Cambridge, Mass., February 1938, pp. 21–37, charts.)

The tabulations of prices of consumers' goods and producers' goods from 1660–1822, and of public finance and national debt during periods of prolonged and costly wars from 1689–1816, indicate a significant relationship between price changes and credit inflation for the financing of wars.

An annual report of Shanghai commodity prices, 1936. Shanghai, National Tariff Commission, [1937?]. 126 pp., charts. (In Chinese and English.)

In addition to the statistics of wholesale prices and index numbers thereof for Shanghai, index numbers of wholesale prices are given for other Chinese cities, Japan, the United States, and the United Kingdom, and indexes of cost of living for Shanghai, Peiping, and Tientsin.

Relief Measures and Statistics

America on relief. By Marie Dresden Lane and Francis Steegmuller. New York, Harcourt, Brace & Co., 1938. 180 pp., chart.

Reviews the development of relief work in recent years, conflicts of principle in its administration, and problems encountered in connection with specific groups such as migratory and chronically submarginal agricultural workers; women who have not had work experience; disabled persons under 65 years of age; those who would normally be employed in education, recreation, or the arts; and unemployed youth.

This question of relief. New York, Public Affairs Committee, 1938. 32 pp., charts. (Public Affairs Pamphlet No. 8—revised.)

A discussion in popular style of the questions: Are relief standards too high? Do relief recipients turn down jobs? Which is better—work relief or the "dole"?

The relief problem in Montana: A study of the change in the character of the relief problem. By Carl F. Kraenzel and Ruth B. McIntosh. Bozeman, Montana Agricultural Experiment Station, 1937. 64 pp., map, charts. (Bulletin No. 343.)

Includes data on family composition and on the occupational history of heads of relief households.

Civilian Conservation Corps. (In the Black Hills Engineer, South Dakota State School of Mines, Rapid City, December 1937, pp. 3–81.)

A general account of the Civilian Conservation Corps, by the Director of that body, is followed by 10 other articles dealing with various activities of the Corps in the Black Hills.

Sickness Insurance and Benefits

Sickness insurance in Denmark. Washington, U. S. Bureau of Labor Statistics, 1938. 7 pp. (Serial No. R. 706, reprint from February 1938 Monthly Labor Review.)

General aspects and functions of the sick-benefit organization. By R. R. Sayers, Gertrud Kroeger, and W. M. Gafafer. Washington, U. S. Public Health Service, 1937. 18 pp. (Reprint No. 1874 from Public Health Reports, November 5, 1937.)

Report of a study covering 731 industrial plants in each of which a sick-benefit organization of some type was maintained. The study shows distribution of the plants by industries and industrial groups and by geographic regions; membership of the various types of benefit organizations; and the rules governing membership and benefit payment.

Social Security

The Social Security Act in operation: A practical guide to the Federal and Federal-State social-security programs. By Birchard E. Wyatt, William H. Wandel, and William L. Schurz. Washington, Graphic Arts Press, Inc., 1937. 382 pp.

Explanation of the act and of its practical operation, by members of the staff of the Social Security Board.

Reichsversicherungsanstalt für Angestellte—geschäftsbericht über das jahr 1936. Berlin, [1938?]. 40 pp.

Report on social insurance for salaried employees in Germany in 1936.

Sugar-Beet Labor

Wages, employment conditions, and welfare of sugar-beet laborers. By Elizabeth S. Johnson. Washington, U. S. Bureau of Labor Statistics, 1938. 19 pp. (Serial No. R. 703, reprint from February 1938 Monthly Labor Review.)

Technological Changes

Cigar makers—after the lay-off: A case study of effects of mechanization on employment of hand cigar makers. By Daniel Creamer and Gladys V. Swackhamer. Washington, U. S. Works Progress Administration, 1937. xviii, 93 pp., charts, illus. (National Research Project, Studies of Effects of Industrial Change on Labor Markets, Report No. L–1.)

Reviewed in this issue.

Unemployment Insurance and Relief

Unemployment prevention through unemployment compensation. By Harry Weiss. (In Political Science Quarterly, New York, March 1938, pp. 14–35.)

Discusses the extent to which the unemployment-insurance laws of the different States combine the objectives of unemployment prevention and unemployment relief. While these objectives are fully incorporated in the laws of only two States and partially in five others, the merit-rating provisions in a large number of States are aimed at employment stabilization. The author concludes that merit rating is unsound because it is ineffective as a preventive of unemployment and in seeking this end it endangers the solvency of the pooled fund.

British unemployment policy—the modern phase since 1930. By Ronald C. Davison. London, Longmans, Green & Co., 1938. 136 pp.

Account of the methods of meeting the unemployment problem in Great Britain, particularly from 1930 through 1937. The author has endeavored to show not only what was done but the reasons for changes in policies.

Reports of Unemployment Insurance Statutory Committee on financial condition of the Unemployment Fund on December 31, 1937. London, 1938. 66 pp.

Reviewed in this issue.

Port labor in Aberdeen and Glasgow: Report of board of inquiry appointed by Minister of Labor under Unemployment Insurance Act, 1935, section 100 (3). London, Ministry of Labor, 1937. 63 pp.

Vacations

Paid vacations in Latin America. Washington, U. S. Bureau of Labor Statistics, 1938. 5 pp. (Serial No. R. 707, reprint from February 1938 Monthly Labor Review.)

Wages and Hours of Labor

Differentials in industrial wages and hours in United States. By M. Ada Beney. New York, National Industrial Conference Board, Inc., 1938. 203 pp. (Study No. 238.)

Detailed data, presented in 180 tables, show average hourly and weekly earnings received by male and female workers in different regions and States, in communities of different sizes, and in large and small plants. Separate figures are given for individual occupations in eight different industries—foundries and machine shops, furniture, lumber, cotton textile, printing, electricity, gas, and paper and pulp.

Tips in relation to wages under the social security program. By Rae L. Needleman. Washington, U. S. Social Security Board, Bureau of Research and Statistics, 1938. 44 pp.; mimeographed. (Bureau Memorandum No. 27.)

Current wages in manufacturing industry in foreign countries. New York, National Industrial Conference Board, Inc., 1938. 14 pp. (Supplement to Conference Board Service Letter, March 7, 1938.)

Hours of work provided in collective agreements in 1937. Washington, U. S. Bureau of Labor Statistics, 1938. 8 pp. (Serial No. R. 704, reprint from February 1938 Monthly Labor Review.)

The fair-wage principle in New Zealand. By E. J. Riches. Melbourne, Melbourne University Press, 1937. 20 pp. (Reprinted from Economic Record, December 1937.)

The changes in theory as to fair wages are traced over the period during which wage fixing has been governed by arbitration award in New Zealand.

Wage incentive methods, their selection, installation, and operation. By Charles Walter Lytle. New York, Ronald Press Co., 1938. 468 pp., charts. (Rev. ed.)

In this edition, a chapter is added on "Recent Developments and Incentives", for the period since 1929, from the point of view of management.

Women in Industry

Differences in earnings of women and men. By Mary Elizabeth Pidgeon. Washington, U. S. Women's Bureau, 1938. 57 pp., charts, illus. (Bulletin No. 152.)

A compilation of original and secondary material analyzed to compare the earnings of women with those of men in similar work in various industries and occupations.

The Woman Worker. Washington, U. S. Women's Bureau, January 1938. 16 pp.

The Woman Worker, a printed periodical to be issued every two months, takes the place of the mimeographed news letter formerly issued by the Women's Bureau. This first number of the printed publication discusses briefly the activities of the Women's Bureau, minimum wages and other legislation affecting women, and other matters.

Why women work. New York, Public Affairs Committee, Inc., 1938. 32 pp., charts. (Public Affairs Pamphlet No. 17.)

Study of the family responsibilities and dependents of professional and business women, based upon data submitted by 12,043 members of the National Federation of Business and Professional Women's Clubs. The survey showed that 48 percent of the women covered were wholly or partially supporting one or more persons other than themselves, and that one in every six had the entire responsibility for a household of from two to eight people.

Youth Problems

Organizations and programs for rural young people: Summary of 1936 annual narrative reports of State and county extension workers, including many excerpts. By Barnard D. Joy. Washington, U. S. Department of Agriculture, Extension Service, 1937. 41 pp.; mimeographed. (Extension Service Circular 273.)

Youth in the toils. By Leonard V. Harrison and Pryor McNeill Grant. New York, Macmillan Co., 1938. 167 pp.

After pointing out what they regard as the defects of the existing system for treatment of young male offenders in New York, the authors propose the creation of new legal machinery and the authorization of new methods for dealing with delinquent boys.

General Reports

Production, employment, and pay rolls in 1937. By Nelson M. Bortz. (In Labor Information Bulletin, U. S. Bureau of Labor Statistics, Washington, March 1938, pp. 8–13.)

Alaska—its resources and development. Washington, U. S. National Resources Committee, 1938. 213 pp., maps, illus. (Regional Planning Series, Part VII.)

Part I of the report contains a statement on policy and recommendations for planning prepared by a special Alaska resources committee, and Part II, a series of staff reports prepared by groups representing different Federal bureaus primarily concerned with various Alaskan problems. Education of the natives, labor conditions, labor organization, labor legislation, and contact between Federal and territorial agencies directly interested in the welfare of labor are among the matters covered.

Manufacturing in Rhode Island. By Henry W. Mann. [Providence?], Rhode Island State Planning Board, 1937. 97 pp., map; mimeographed. (Special Report No. 13.)

Analyzes the development, existing status, and trends of manufacturing in the State. Among the major subjects covered are industrial wages, including average annual wages; prevailing weekly hours of labor; and seasonal employment.

Second annual report of South Carolina Department of Labor, for period June 30, 1936, to June 30, 1937. Columbia, 1937. 104 pp.

Contains data on strikes and lock-outs, child labor, employment, hours, wages,, and labor conditions. There is also a directory of the principal industries of the State.

Annual report of Tennessee Valley Authority, for fiscal year ended June 30, 1937. Washington, 1937. 446 pp., illus.

Information is given on measures taken by the Authority to safeguard the health and safety of its employees, housing provided for them, labor relations, and other personnel matters, and on cooperative associations in the Tennessee Valley.

Fortieth annual report of Virginia Department of Labor and Industry, for year ending September 30, 1937; industrial statistics, calendar year 1936. Richmond, 1937. 28 pp.

Statistics are presented showing average number of wage earners employed and number working on different weekly schedules of hours, in manufactures, services, and public utilities; accident statistics, total wages paid, and total number of workers employed, in mines and quarries; child-labor trend as indicated by issuance of employment certificates; and labor inspection in factories, laundries, and stores.

Labor report [Australia], 1936. Canberra, Commonwealth Bureau of Census and Statistics, 1937. 200 pp.

Data on prices, wages, employment, and labor organization, accompanied by a historical summary of labor legislation.

Statistical year book of Kingdom of Siam, 1933–35. Bangkok, Department of Secretary-General of Council of Ministers, Central Service of Statistics, 1937. 603 pp., map. (In Siamese and English.)

Covers population, immigration, foreign trade and commerce, agriculture, mining, education, prices, government employees and pensions, and other matters. The latest figures in most of the tables are for 1934–35, although in some cases (prices and mining) the data are brought down to 1935–36.

Statistisk årsbok for Stockholms stad, 1937. Stockholm, Statistiska Kontor, 1937. 290 pp.

Statistical yearbook on economic and social conditions in Stockholm in 1937, including public health, housing, wages, unemployment, employment service, and welfare work. French translations are provided for table of contents and headings and stubs in tables.

Social work and legislation in Sweden. Stockholm, Royal Social Board [Socialstyrelsen], 1938. 352 pp., illus. (English ed.)

Employment and unemployment, protection of workers, social insurance, public hygiene, welfare and relief work, small-farm problem, housing, and the cooperative movement are among the subjects covered.

Report of chief inspector of factories and shops, Victoria, Australia, for year ended December 31, 1936. Melbourne, 1937. 31 pp.

Gives accident, employment, wage, and other labor statistics, and a section on new legislation.

Proceedings of twenty-second annual meeting of National Conference of Catholic Charities, Seattle, Wash., August 2–5, 1936. Washington, National Conference of Catholic Charities, [1937?]. 460 pp.

The principal topics taken up at the meetings of the committee on social and economic problems were unemployment compensation as part of the social-security program; social legislation with special reference to working conditions of women in industry; unemployment as a challenge to the State; and whether permanent unemployment is necessary. Considerable attention was given by the conference to youth activities.

A trial bibliography of bibliographies relating to labor—a preliminary check list. Prepared by New York Federal Writers' Project, Works Progress Administration. New York, 235 East 42d Street, [1938?]. Various paging; mimeographed.

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